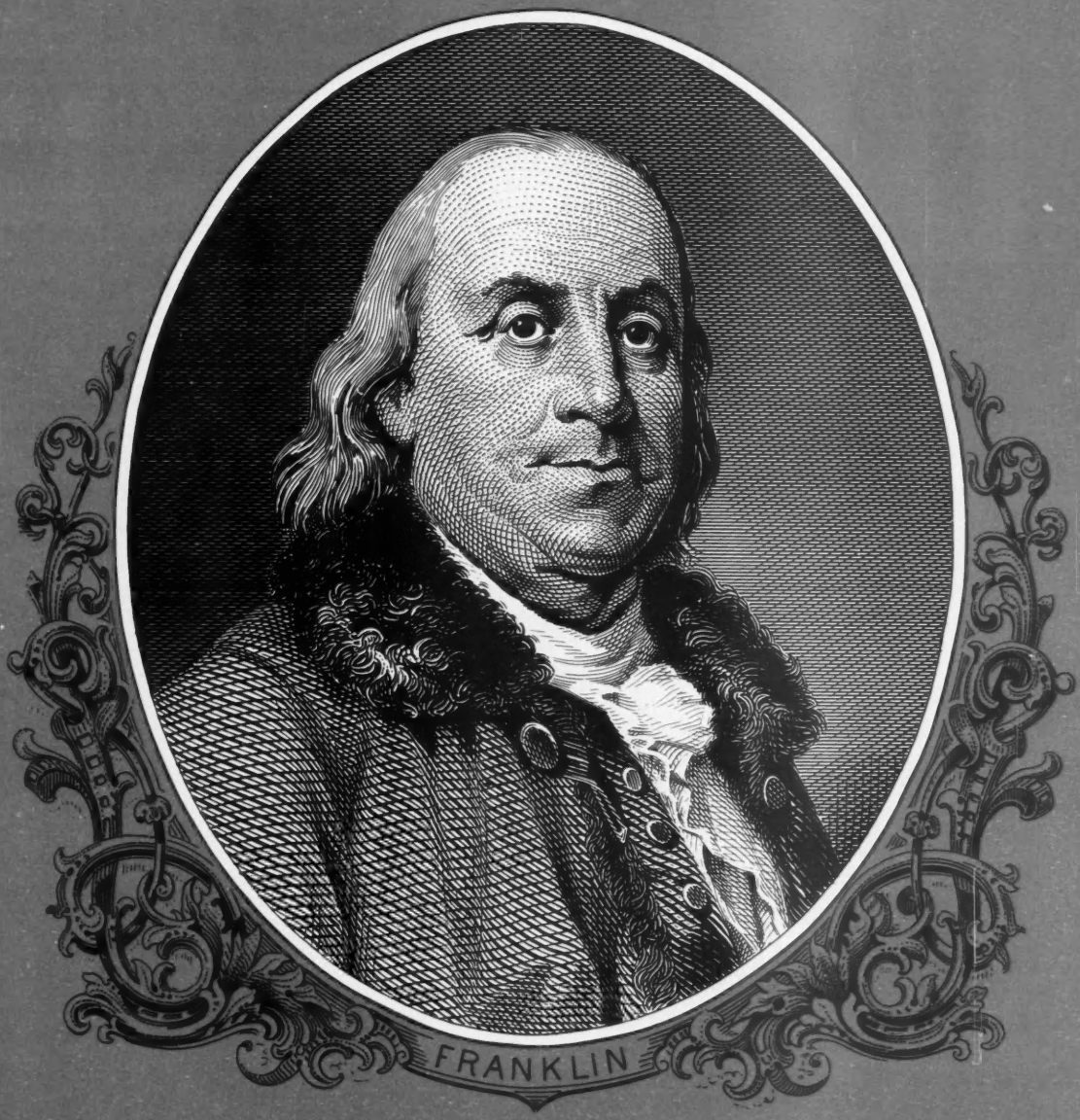
APRIL 28, 1975

Commerce Today



America's Foremost Fireman

FROM THE
SECRETARY

Mounting The Attack Against Fire

This column was written by Acting Secretary of Commerce John K. Tabor.

One American will die. Thirty-four will be injured, some of them disfigured or crippled for life. Property loss will total $300,000. All during the next hour.

The cause: fire.

The statistical averages project that this tragic toll will result from more than 300 destructive fires that will rage somewhere in this country during the next 60 minutes.

When 1975 is over, fire will have killed some 12,000 Americans, injured 300,000, and cost the country more than $11 billion. And once again, the richest and most technologically-advanced nation in the world will have led all other industrialized countries in per capita deaths and property loss from fire.

But today there is hope of reducing these shameful losses. For the first time in history, the Federal Government is mounting a coordinated attack on the age-old problem of fire.

President Ford signaled the beginning of this attack last October when he signed into law an act creating in the Commerce Department the new National Fire Prevention and Control Administration.

Charged with cutting the nation's fire losses in half within the next generation, the Administration will conduct research into the multiple causes of fire, improve the technology and training available to the nation's fire fighters, conduct public education programs on fire and fire prevention, and organize a center for information on fire prevention and control.

In its first six months of operation, the new agency has initiated several significant programs. They cover the fields of training and education, research, and collection and analysis of data on the prevention and control of fires.

Preparations are under way to create the National Academy for Fire Prevention and Control. This facility will be charged with improving the professional training of fire service personnel.

Information about fires will be coordinated through the new National Fire Data Center. It will have the task of providing an accurate nationwide analysis of the fire problem, assisting in setting priorities, and monitoring the progress of programs to reduce fire losses.

Business and industry have an important role to play in this entire field.

Improved building construction and the development of fire-retardant materials used in furnishings are areas where industry can make significant contributions. The plastics industry spends $40 million annually on research to improve the fire safety of its products. Organizations such as the American Society for Testing and Materials and the National Fire Protection Association set standards for many construction materials.

Basic industry and manufacturing are making good progress in the prevention and control of fires in their own facilities. The number of fires in this category, for example, was reduced from 66,000 in 1968 to 47,300 in 1973.

Business also is a major contributor to fire education programs.

Probably the greatest stumbling block to reducing the nation's fire toll is simply the indifference of the general public. Relatively few people take even the simplest precautions against fire in the home, where 87 percent of all fire deaths occur.

This is why educating people about fire is so vitally important. They should know how to minimize its risk and how to cope with it effectively once it starts.

Much more needs to be done to reach the public with fire safety messages. Government now promises to do its part. It is my hope that the business community will redouble its education efforts also.

Loss from fire is an area in which America wants to be best by having the least. Let's all join together to make America's fire losses the lowest.

John K. Tabor

Commerce Today

Vol. V, No. 15, April 28, 1975

2 Economic Highlights

A decline in Real Gross National Product in the first quarter of 1975 was due entirely to a massive liquidation of inventories—a development that helps clear the way for an economic recovery.

4 Newsmemo

5 Fire Unit Gives National Focus to Fight Against Deaths, Damage

The U.S. has the worst record in deaths and property loss by fire among major industrialized nations. The National Fire Prevention and Control Administration aims to do something about it.

8 Sales Outlook For U.S. Consumer Goods Seen Growing In Far Eastern Countries

A Commerce specialist who assessed markets in Japan, Australia, Hong Kong and Singapore finds that despite general business downturn, the appeal of consumer items from the U.S. is increasing.

11 Solar Heating, No Longer A Theory, Moves Into The Real Business World

An office building in Denver may be the first commercial establishment in the country to be heated by the sun. Progress is under way in several areas placing more emphasis on this energy-saving system.

13 Energy Management Digest

15 Domestic Business Report

Minority entrepreneurs answer local needs with motel, janitorial services—Apparel makers discuss consumer preferences, flammability at technical forum—U.S. households getting smaller, see change in characteristics of heads of families—Manufacturers urged to keep sharper eye on supply of non-ferrous metals—Nine Western Hemisphere nations join to modernize continental measurement systems—Handicapped veterans learn data-processing in pilot program.

22 International Commerce Report

Quarterly World Market Report—Trade Mission assesses three Central African markets—Washington Official Trade Briefs—Reports on U.S. exhibitions abroad—Economic situation in Nigeria, Czechoslovakia, Upper Volta, Ghana, Costa Rica, Burma—Calendar for World Traders—Licensing, joint venture, sales and construction opportunities around the world.

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COVER: *He may not be so well known as a fire fighter but Benjamin Franklin did found the first Philadelphia fire companies in the 18th century. It seems appropriate to remember him in that role as the government begins organizing programs designed to reduce the nation's lamentable fire record which annually costs an estimated $11 billion. The story of the National Fire Prevention and Control Administration's programs begins on page 5. Acting Secretary Tabor comments on the problem in his "From the Secretary" column on opposite page.*

Inventory Liquidation Causes Sharp Drop In GNP, But Way Cleared For Recovery

Economic Highlights is prepared by James L. Pate, Assistant Secretary of Commerce for Economic Affairs.

The nation's output of goods and services declined more steeply in the first quarter of 1975 than at any time since the post-World War II adjustment period. There were strong indications, however, that the recession was nearing a low point and that an economic recovery would be under way in the latter half of the year.

The drop of 10.4 percent at an annual rate in Gross National Product (GNP), after adjustment for inflation, reflected primarily a massive liquidation of inventories—a development that had been considered a pre-condition to an upswing in economic activity. Furthermore, the rate of inflation as measured in the National Income Accounts moderated substantially.

Because of the slowing in the rate of price increases, and the decline in output, current-dollar GNP also declined from an annual rate of $1,431 billion to $1,419 billion, or a little more than 3 percent. It was the first such decline since 1960.

In real terms, the $22 billion decline in GNP in the first quarter approximately matched the swing in inventories—an $11 billion decline following the $10.9 billion accumulation in the fourth quarter. Correspondingly, final sales showed little change, in sharp contrast to the 11.7 percent annual rate of decline in the fourth quarter.

Most of the fourth-quarter increase in inventories occurred in automobiles as sales fell off sharply when new model cars were introduced last fall. Other industries, especially other durable goods producers, also were carrying excess stocks, however, and production was sharply curtailed in many industries in order to bring inventories in closer alignment with sales. About half of the first-quarter liquidation was in automobiles.

It now appears that the bulk of the inventory adjustment has been accomplished in just one quarter, a shorter time span than anticipated. While some further correction probably will be required in automotive inventories, the stocks of most lines of general merchandise may already be fairly well-balanced with sales.

The magnitude of the inventory adjustment implies that this component of GNP will probably not be a major negative factor in the economy in the immediate future. Furthermore, the upswing that is expected around mid-year could receive substantial reinforcement if inventory accumulation resumes later in the year.

Among the other major components of real GNP, personal consumption expenditures increased in the first quarter while both business fixed investment and home construction continued to decline. The gain in consumer expenditures was due primarily to a partial recovery in automobile sales following the precipitous decline in the previous quarter. Auto sales were heavily influenced by rebates offered by manufacturers in late January and February.

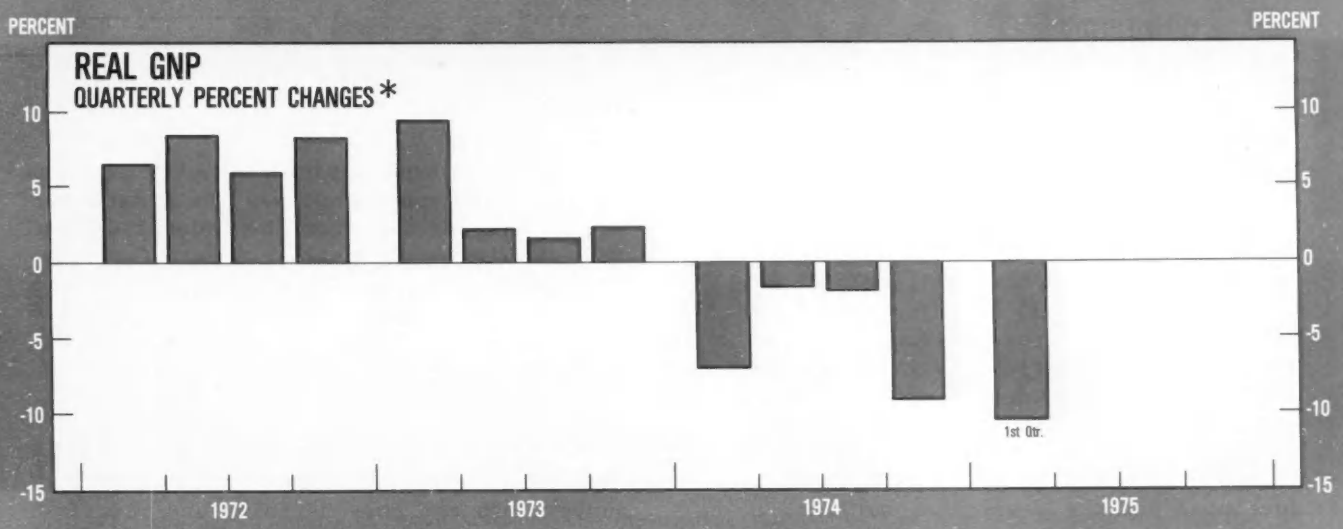
Reductions in the rates of price increases during the first quarter were both pronounced and widespread. A large part of the improvement can be attributed to lower prices for farm products at the farm, processing, and wholesale levels. Price increases have moderated in recent months for wholesale industrial commodities and for a variety of goods at retail as well.

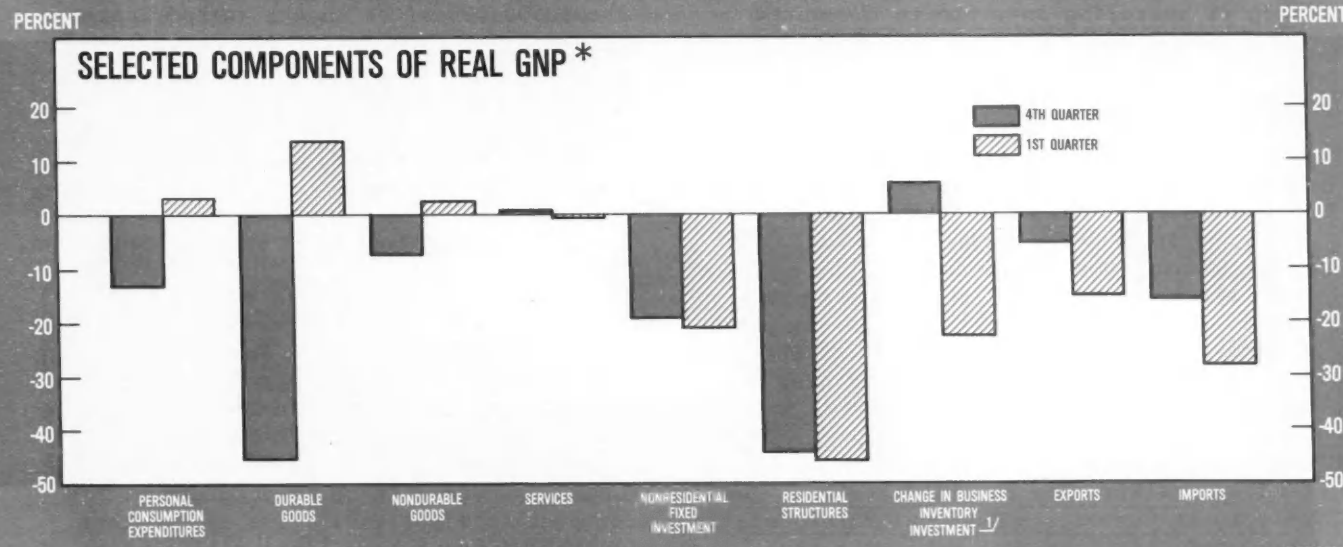
The Commerce Department's Bureau of Economic Analysis (BEA) has shifted from the GNP price deflator to the GNP price indexes as the primary measures of price changes in the economy. Since the deflator is based on shifting weights that reflect current changes in the composition of GNP, the underlying trend in prices can be obscured by a marked shift in the composition of output (see *Economic Highlights*, Feb. 17). The GNP chain price index uses the composition of GNP in the previous quarter as the basis for weighting, while the GNP fixed-weighted index is based on the composition of GNP in 1967. However, the Bureau of Economic Analysis will continue to publish all three price measures.

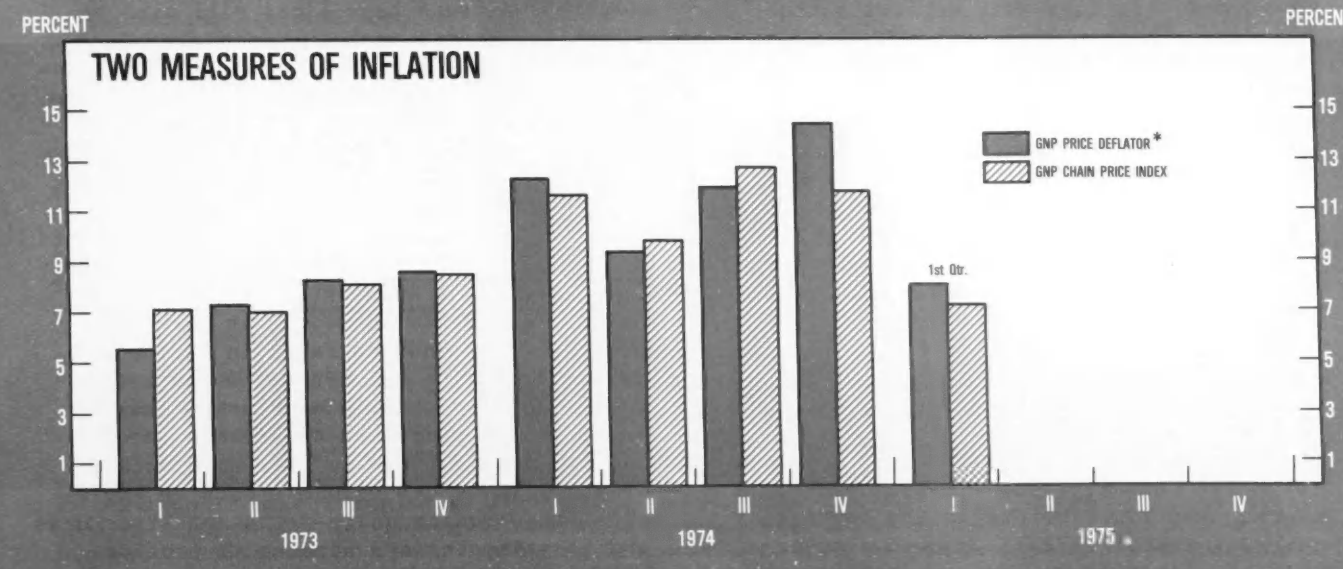
The difference between the indexes and the implicit deflator was notable in the fourth quarter of last year, when the deflator was significantly affected by the sharp drop in automobile sales. The indexes offer evidence that the recent peak in the rate of inflation was reached in the third quarter of 1974 while the deflator indicated that the rate continued to climb in the final quarter of the year.

In addition to the rapid adjustment in business inventories, there are other signs that the economy is nearing the end of the longest and most severe recession in the post-World War II period. While the real GNP figures measure total economic activity during the quarter, they do not reflect month-to-month changes within the quarter. For example, the decline in industrial production in March was substantially less than in January and February. Private payrolls rose in March for the first time since October. And, housing starts have been virtually flat in the first three months of the year following two years of persistent and pronounced decline.

There are strong signs of an impending recovery in consumer spending. The moderation of inflation and other factors apparently have resulted in some increase in consumer confidence, according to opinion surveys, following a long period of decline. Retail sales edged downward in March, but the decline was due entirely to a drop in auto sales following the end of most rebate programs. Retail sales had increased in real terms in the previous three months. Furthermore, the recently enacted income tax reductions should provide a strong impetus for further gains in consumer spending — the sector that holds the key to economic recovery in 1975.







* SEASONALLY ADJUSTED ANNUAL RATES

1/ BILLION DOLLAR CHANGE IN BUSINESS INVENTORY INVESTMENT

Newsmemo

The "new challenges" noted by President Ford in his State of the World address this month deeply involve the U.S. business community. They are: 1) lessening worldwide hunger by our technological skill and productive capacity; 2) building new world institutions for trade, finance and raw materials distribution; 3) gaining cooperation in drawing resources from the seas; 4) insuring that technology, while serving man's needs, does not destroy his environment; 5) reconciling the interests of the developed and the developing nations.

Keep it operating anywhere in the world with spares and service. That motto for export success explains why U.S. planes still outsell the world despite stiff foreign competition, open or hidden subsidies and governmental preferences. The Aerospace Industries Assn. puts the situation in this nutshell: "A transport grounded in Karachi because of a mechanical problem serves no purpose. The network of spares and highly-trained technical reps from U.S. companies promptly puts it where it was designed to be: in the air carrying passengers and cargo--earning a return on the investment involved."

A new dental instrument that works on fillings rather than cavities has been developed at Commerce's National Bureau of Standards. It is a test apparatus that can determine, in days rather than years, how durable the various dental restorative materials will be in the human mouth. Up to now there has been no accepted way of measuring the wear-resistance of the amalgams or composites used by dentists to correct cavities. The device places realistic chewing pressure on a rotating disc of the material being evaluated. Better testing can be expected to result in the development of better materials.

The fast-changing picture of county government revenue collection and expenditure is now being given a yearly look by the Census Bureau. Such figures were formerly reported in the Census of Governments every five years. The first report in the new series, covering fiscal 1972-73, showed a revenue gain of almost 14 percent over the previous year, and an expenditure rise of 9 percent. The initial report includes the first receipts by counties from the Federal General Revenue Sharing Program. "County Govt. Finances in 1972-73" GF73 #8 is available at $1.45 from Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402.

Where on earth are we? This oft-heard question is anything but whimsical to scientists of Commerce's National Geodetic Survey, who are busy defining and redefining the precise geographic locations of about 500,000 sites in the United States. Their bronze plaques set in stones help surveyors in aligning our highways, bridges, tunnels, pipelines, etc. At each site they must determine the astronomic position, the force of gravity and the curvature of the earth. Distance measurements they make by laser are so precise they err less than a half inch in ten miles.

How far is it from here to there? That's the next question for surveyors, and Commerce's National Geodetic Survey is helping them answer it with 100 percent accuracy at distances of close to a mile. The Geodetic Survey has a team in Florida now setting up measured lines in the 4500-foot range that are held to be accurate within one part to a million. Time and weather permitting, such base lines will also be established this year in Wisconsin, New Mexico and New York. Then the state, county or private land surveyors, many of whom now use advanced electronic distance measuring equipment, can work from these lines to calibrate their instruments with almost absolute precision.

And how far is it from here to there, when the earth won't stand still? Commerce's National Geodetic Survey is at work now along the San Andreas Fault in California, determining with exactitude how much the earth's crust is shifting there. This is a program of precision observation across known geological faults that goes back to 1906. It provides valuable data to engineers in designing quake-resistant structures and to seismologists seeking to predict earthquakes.

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April 28, 1975

Fire Unit Gives National Focus To Fight Against Deaths, Damage

Benjamin Franklin—Patriot, statesman, inventor, philosopher . . . and founder of Philadelphia's fire companies in the 1730s for "the extinguishment of fires and mutual assistance in removing and securing goods when in danger."

Today this nation's need for "extinguishment of fires and mutual assistance" has never been greater. Death and property loss by fire in the United States is the highest, per capita, of the world's major industrialized nations. Though fires actually destroy about $3 billion in property each year, the annual costs to the total economy are conservatively estimated at $11 billion. Fire's annual death toll is estimated at 12,000 lives.

These figures were compiled by the National Commission on Fire Prevention and Control. The Commission's 1973 report to Congress, "America Burning," led to the Federal Fire Prevention and Control Act of 1974. In response to the Act, the National Fire Prevention and Control Administration was created November 1, 1974, within Commerce.

The NFPCA has recently announced plans to reduce the nation's fire losses by 50 percent in the next generation.

The nationwide fire services' continuing participation in NFPCA's activities is an invaluable grass-roots link. The International Association of Fire Fighters and the International Association of Fire Chiefs were jointly instrumental in the establishment of the National Commission, and through it, the Act which brought the NFPCA into being. Both have been working toward this end since the 1960s when both organizations passed resolutions seeking such legislation.

Assistance without regulation

Without regulatory, standard-setting or enforcement responsibilities, the NFPCA moves forward as catalyst and coordinator—consolidating, evaluating, exhorting, assisting. Each major program hinges upon the other, assisting and drawing from other federal agencies, from government at state and local levels and the private sector's vast areas, both of need and of excellence.

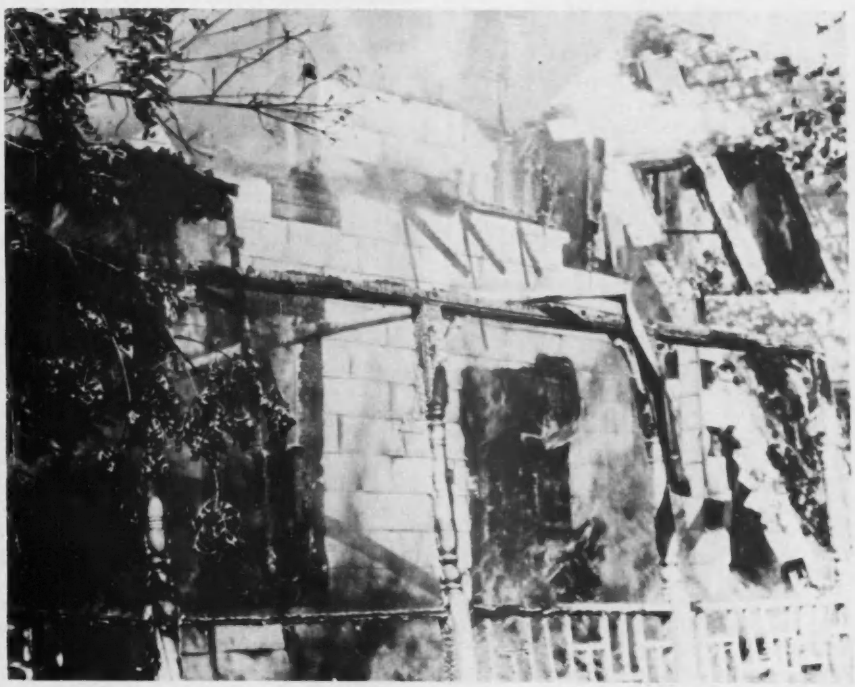
The Administration, to date, is a task force-oriented organization, headed by Acting Administrator Dr. Joseph E. Clark. Its staff, many of whom were detailed from other government agencies, has been augmented by consultants—all experts in the various fire prevention and control fields. Through participation in the Intergovernmental Personnel Exchange system, NFPCA also receives inputs from experienced fire service personnel outside the government who, in turn, gain insight into NFPCA's policies and programs for relay to their communities.

NFPCA assistance takes many forms, with priority going to: (1) education and training, (2) collecting and analyzing fire data, and (3) research and development.

The Act calls for a program "to advance the professional development of fire service personnel and of other persons engaged in fire prevention and control activities. The National Academy for Fire Prevention and Control will carry out this program.

A survey of existing educational and training programs throughout the country was the first step taken in this key area (see *Commerce Today*, Sept. 30, 1974). The survey is now in progress, conducted by a consortium of fire service organizations and coordinated by the National Fire Protection Association. Its information-culling processes cover the full range of existing education and training programs, gathering data from rural communities with little-to-none to New York's $13 million dollar academy on Ward's Island.

The study is evaluating courses, fa-



A MAJOR KILLER—*Fires kill 12,000 Americans annually. The National Fire Prevention and Control Administration aims to cut this figure in half in one generation.*

CUTTING THE DAMAGE—*Fire losses to the total economy of this country are conservatively estimated at $11 billion per year. Thus, any meaningful reduction would bring a strong boost to the national economy as well as curbing individual grief and inconvenience.*

cilities, resources, instructional staff backgrounds and other key elements in order to determine what's being done right and what needs improving.

The Academy is expected to develop more along the lines of the FBI Academy than a West Point or Annapolis. The major distinctions lie between the FBI's short courses, conferences and symposiums and the service academies' four year degree-type programs.

While present plans do not call for the Academy to issue degrees, it will almost certainly offer academic credit in undergraduate as well as graduate courses.

Projected activities include studies in fire prevention techniques, tactics and command procedures for fire safety officials. Arson detection and investigation is receiving special Academy attention. Arson incidents have more than tripled in the past ten years. (*Commerce Today*, March 17).

NFPCA's Public Education Office, an important part of its education and training effort, is examining public education programs in fire prevention. The most effective will be identified in terms of reduced fire losses and studied for their possible application on a national basis. If determined feasible, the Public Education Office will assist state and local fire services with their implementation.

Re-education will be a major facet of the agency's training function: individuals will have to un-learn many dangerous practices before they can learn the proper ones. For example, employees in Seattle's new fire-safe GSA building were asked to change some of their basic habits and thinking patterns in learning to follow instructions concerning the building's advanced safety system. Another indication of the need for attitudinal changes through fire prevention education: In the United States, the public seems to consider fire a misfortune or an accident; in Japan, with fire incidence 20 times lower, having a fire is considered a felony.

The National Fire Data Center is exploring methods for securing, abstracting and indexing fire literature. The results of a recent study show that much of the existing literature is not covered by existing data systems. Further, the study found that a large quantity of the world's fire literature is published in foreign languages and that Americans use extremely little of it. Therefore it seems clear that the United States has not been taking full advantage of available literature in the field.

Methods are also being explored for securing and including foreign language materials in a core fire literature data system.

Building upon work previously conducted by the National Bureau of Standards, the NFDC's National Fire Data System is collecting data from seven different states. A preliminary set of data elements, designed to reflect the nation's fire experience, is being used and will provide information for analysis and feedback to participants. Through development of a sampling plan and other projects, NFDC will encourage other states to join the system on a nationwide scale, collecting data and feeding back analyzed information to the participants.

NFPCA's Fire Safety Research and Development program aims at identifying and removing unreasonable fire hazards from the environment, a comparatively long-term effort. Its short-term focus is on efforts to provide immediately-applicable technology for fire safety. A major effort is the standardization, compatability and interchangeability of fire apparatus and equipment.

Several ongoing programs have been transferred from the National Bureau of Standards, including development of techniques to assist in the management of

Nationwide Training Study

Commerce's National Fire Prevention and Control Administration has awarded a $84,983 contract to a consortium of fire service organizations to survey the fire service training and education programs currently available in the United States.

The final report of the survey will include a computerized tabulation of all significant courses and programs available, and conclusions relating to the design requirements of a National Fire Academy System.

"The Federal Fire Prevention and Control Act of 1974 requires the establishment at the earliest practicable date of a National Academy for Fire Prevention and Control to advance the professional development of fire service personnel," said Dr. Joseph E. Clark, NFPCA's acting administrator, "to accomplish this objective, we consider a thorough knowledge of existing resources in education and training in fire prevention and control to be the best base for establishing a strong National Fire Academy System.

"It is the first major step in defining specific improvements and additions needed," he continued. "To accomplish this, the NFPCA is contracting with a consortium composed of four independent, non-profit organizations recognized internationally in the fire service field—the International Association of Fire Chiefs, the International Association of Fire Fighters, the International Society of Fire Service Instructors, and the National Fire Protection Association."

The consortium will survey local fire departments, and state directors of fire training in community colleges and universities. Questionnaires will be used to identify existing programs and resources. The survey is scheduled to be completed in six months.

The NFPCA was formally established by the Secretary of Commerce on November 1, 1974.

BRINGING IT TOGETHER—*The NFPCA is surveying educational and training techniques from around the nation, such as these rookie firemen at left are receiving. It is also assessing the state of the national research effort. At right, GE scientists test a technique for measuring the flammability of a liquid by finding the minimum concentration of oxygen that will support its combustion.*

fire departments; determining water flow requirements for residential fires; and developing procedures to evaluate the cost effectiveness of consolidating neighboring departments.

A new study will define barriers to the increased use of residential fire detectors. Another new project involves the design of low-cost sprinkler systems for residential areas.

In the major project area concerning protective equipment for firefighters, criteria for firemen's coats are being developed. Traditionally, "turnout" coats have been heavier than need be, and have not been made of flame-retardant material. By using standard testing methods and, to the greatest degree possible, laboratory tests of the textile industry, NFPCA is defining characteristics of design and of flame retardant materials used. Industry's suggestions are being solicited throughout the whole process.

While master planning is recognized in the Act as the responsibility of state and local governments, it authorizes the NFPCA to assist with master planning activities. The NFPCA has already begun developing procedures for use by local governments and fire departments in preparing master plans. Two cities have jointly developed such procedures, which are scheduled for field testing in 1976. The master plan concept is designed to achieve (1) community responsiveness through assisting local fire jurisdictions in setting goals and priorities to meet changing needs (2) maximum fire protection payoffs through optimum allocation of available resources, and (3) continued cost-effectiveness monitoring by providing accessibility to data systems.

The Fire Research Center

Located at the National Bureau of Standards facilities in Gaithersburg, Md., and funded on a reimbursable basis by the NFPCA, the Fire Research Center develops test methods, standards, design concepts, specifications and recommended fire practices. The Center works for adoption of its recommendations by voluntary standards groups.

Projected functions include increasing toxicological research and fire testing.

Public Safety Awards — Exceptional service will be recognized by the presentation of (1) The President's Award for Outstanding Public Safety Service, and (2) The Secretary's Award for Distinguished Public Safety Service. The President's Award will be presented to public safety officers for extraordinary valor in the line of duty, or for outstanding contributions to public safety; the Secretary's Award will be presented by the Secretary of Commerce, of Defense, or by the Attorney General to public safety officers for distinguished service in their fields. Selections will be based on nominations submitted annually by federal, state, county and local government officials.

Fire Safety Effectiveness Statements. Owners and managers of apartment building, commercial, industrial and transportation structures will be invited to prepare Fire Safety Effectiveness Statements and submit them for evaluation. Those buildings or structures qualifying for certification might then use the certification on letterheads or in advertisements.

Firefighting on property under federal jurisdiction—A national claims program for the reimbursement of fire services that fight fires on property under federal jurisdiction will be administered. Reimbursement will be based on those additional costs incurred by the fire service beyond its normal operating costs, less any payments the United States has made to them for such fire service support.

Annual conference. The NFPCA's first annual conference is tentatively scheduled for late 1975 or early 1976. All of the nation's fire services will be encouraged to send representatives to exchange information, experience and ideas, and to participate in education programs on new techniques in fire prevention and control. The conference promises unprecedented concentration of expertise in the field, and will be open to the public.

U.S. Consumer Goods Sales Outlook Strong In Far Eastern Countries

Growth of foreign purchasing of American consumer products remains unabated in the face of worldwide recession. This is the report of a Commerce Department international trade specialist who has just returned from a month-long appraisal of Far East markets.

Roy F. Gootenberg, chief of consumer goods promotions abroad for Commerce's Office of International Marketing (OIM), discussed prospects with officials of major department and chain stores in Australia, Singapore, Hong Kong and Japan.

"Top management of the Far East retail trade continues to purchase an increasing share of U.S. housewares, apparel, sporting goods, appliances, toys, games, hardware, home furnishings, novelties and outdoor equipment to meet effective demand for the American look despite temporarily depressed economic conditions," Gootenberg is reporting. "Whether this is the culmination of predictable social and commercial trends such as the Westernization of tastes, the 'leisure-time revolution,' higher disposable income in certain sectors, the accelerated rate of inflation abroad, or whether it is the result of discernible government actions such as currency revaluations, U.S.-supported promotions, easing of import restrictions, and encouragement of buyers' travel to the United States, the fact is that U.S. consumer products have become competitive in price as well as quality."

OIM is focusing on key markets represented by some of the most respected retail institutions in the Far East. Australia has its David Jones, Meyers, Georges, Dalgety, and Grace Bros.; Hong Kong, its Wing On, Shui Hing, Sincere, Crane group, Dragon Seed, and Mode Elite; Singapore, its Metro; Japan, its Daimaru, Matsuzakaya, Isetan, Seibu, Mitsukoshi, Hankyu, Marui Imai, and Takashimaya; and Taiwan, Tah Shing and Far Eastern Stores, among others. All are increasingly devoted to U.S. goods, services and promotions.

At least a dozen chains are planning large incremental purchases for their U.S. Bicentennial theme events in 1975 and 1976—the "American Fortnight" in Hong Kong, the David Jones and Grace Bros. multimillion-dollar proposals for Australia, and the Seibu, Isetan, and Takashimaya plans for Japan. Metro and Tah Shing will open unique American promotions this spring, in Singapore and the Republic of China.

One significant trend emerges directly from OIM in-store promotional activities in Japan: long-range institutional tie-ins. For example, as a result of the first such in-store event, a million-dollar promotion at the Seibu-Seiyu chain of 100 stores in and around Tokyo, Sears in 1972 established a mail-order facility. Seibu International acquired distribution rights for Sears merchandise throughout Japan. Sales are no longer limited to mail-order counters in selected stores, as Seibu has moved from mail-order to off-the-floor sales and stockpiling of popular items in Japan. With its Japanese language Sears catalog featuring 1,000 of Sears' 70,000 items and deliveries within five days from stock, these activities resulted in a $7 million export of U.S. goods in 1974.

OFF PRESS IN MAY—*Yomiuri Shimbun newspaper plans to distribute 150,000 copies of this 276-page catalog of U.S. products throughout Japan next month.*

The precedent-setting and profitable Sears connection is now grossing $1 million per month, and is projected to reach a total of $20 million next year. Management at Seibu-Seiyu was enthusiastic about these direct results of U.S. support.

Other merchandising tie-ins have now been set up: by J. C. Penney with Dai'ei and Mitsukoshi; by Montgomery Ward with Isetan and Matsuya; a "Tiffany Corner" in Mitsukoshi; investment by Joseph Magnin in Dai'ei; establishment of J. C. Penney Japan, Inc.; and formation of the York Seven convenience stores by U.S. Southland Corp.

U.S. Embassy spokesmen in Tokyo are of the opinion that the sought benefits in such a tie-in are the U.S. firm's name and the resultant prestigious image that accrues to the Japanese partner; access to the U.S. retailer's products and merchandising skills; and the U.S. retailer's management know-how.

All of this is occurring in a period that the Embassy observers discern as relatively depressed, a time of reducing inventories generally, of cutting direct imports and of reducing overseas buying trips. The Japan Department Stores Association reported in January 1975 that the annual sales of its member stores declined in 1974, and that this was the first net decline since the association began compiling statistics in 1955.

A powerful new campaign began this month to extend the exposure of American consumer products throughout the Japanese market. April saw the opening at Tokyo's U.S. Trade Center of two significant consumer goods shows: April 9 to 12, the Center was promoting housewares, electrical appliances and home furnish-

APRIL IN JAPAN—*Visitors at this month's Daimaru department stores' U.S. consumer goods promotion now in progress see mannequins displaying the American casual look (photo at left). Note customers attired in western styles, and in photo on right, some in traditional dress. Daimaru, based in Osaka, has branches in Kobe, Kyoto, and Tokyo, all showing U.S. goods.*

ings, with 42 U.S. exhibitors; April 16-19, the Center turned to recreation, sporting and leisure goods, athletic wear, toys, games, perfume and costume jewelry suppliers, with 36 exhibitors.

This campaign for Japanese agents, distributors and trading connections is being accompanied by an unprecedented combination of four retail chain promotions of U.S. consumer goods. Japan-wide publicity and advertising are blanketing the island, Gootenberg observes.

Daimaru, the most important chain in Osaka, opened a six-week promotion on March 27, for which it purchased more than $1.5 million worth of American furniture, jewelry, housewares, and sporting goods. A series of events runnning throughout its branches in Osaka, Kobe, Kyoto, and Tokyo until May 6 will feature the Philadelphia Boys Choir, historical flags of the Revolutionary period, Sioux Indian costumes, Alaskan totem pole carving, and Bicentennial commemorative issue stamp displays.

Matsuzakaya, Tokyo's third largest chain, opened its week-long American promotion on April 3 at 12 participating and affiliated stores, focusing on over $500,000 worth of American housewares, sportswear, and sporting goods. U.S. and Japanese golf represents one major theme, and the availability of American informal sporting and household equipment is featured throughout the stores.

In tandem, the outlets of Hankyu in Osaka and Marui Imai in Sapporo will follow with large-scale American promotions to conclude a month of intensive concentration on merchandising U.S. leisure time products.

Sellers' market

Why this successful and accelerating activity in the light of the recently depressed department store developments in Japan? Market planners are more impressed with the continuing trends in the Japanese economy that portend a sellers' market for American consumer products:

- Japanese consumer goods have become less competitive with rising production costs.
- Japan's consumer prices have risen rapidly.
- U.S. consumer goods imports have become more price competitive since the February 1973 dollar devaluation-yen revaluation.
- Reduction in quota restrictions and plans for reduction in tariff rates increase opportunities.
- Japanese consumer income is increasing at an annual rate of 10 percent.
- The increasing number of Japanese touring the United States has developed an augmented demand for U.S. consumer goods in Japan.
- Japanese labor's 30 percent wage increase is an offset to Japan's 25 percent inflation.
- The housing shortage and high prices which keep most Japanese consumers out of that market stimulate large savings (up to 20 percent of income) that are spent on smaller items to improve the quality of life in their current quarters.

Improving sales totals in Japan are matched by positive trends in Australia, Hong Kong, Singapore, and in Taiwan. Comparable attitudes toward the growth of the American consumer goods presence were expressed by leading merchandisers, whether experienced or unsophisticated in knowledge about the United States.

Australia, for example, appears avid for the latest and best U.S. lines. Its merchants attest to extensive experience in purchasing on the U.S. market. Each of the major outlets is competing for top billing in the focus of the U.S. Bicentennial celebration, in order to multiply its sales of the latest in U.S. consumer technology. Significantly expanded U.S. promotions in 1976 will be featured at the David Jones chain, which plans to purchase incrementally at least $5 million in American apparel and other goods. Fine arts, dress design, American personalities and entertainers are expected to highlight Australia's most influential promotion. Grace Bros. department stores also plan to focus on the U.S. Bicentennial in conjunction with the Australian-American Association's plans, proposing to purchase more than $1 million in U.S. products. The month-long promotion would be carried on through a saturation campaign in all its stores in New South Wales—including newspaper, TV and radio advertising.

Confirms the concept

Gootenberg pointed to the expanded overseas interest in U.S. products as a confirmation of the effectiveness of approaches initiated by OIM three years

SPECIAL ATTRACTIONS—*Among the U.S. products offered on the Hankyu department store counters are American Indian craft items, and at Matsuzakaya in Tokyo, golf clubs—reported to be the fastest moving sporting equipment in Japan.*

ago to support promotion and sale of U.S. consumer goods at prestigious retail establishments throughout the world.

The program had its inception in 1972 when Edward J. Krause, OIM director, outlined an effective concentration and focus on U.S. support of consumer goods promotions abroad. Under his proposal, the Commerce Department was to help various retail establishments around the world hold special promotional events featuring merchandise made in the United States. As they developed, these in-store promotions became notable local occasions in some of the major foreign capitals and commercial centers. They were publicized extensively through radio, TV, newspapers and magazines, outdoor displays, consumer attractions and appearances of well-known personalities, with "made in U.S.A." as the common theme.

How it works

In its current pattern, the in-store promotion program is backed by U.S. Government sponsorship with a budgetary reimbursement for sales promotion costs. The contractual agreement with the foreign retail establishment requires that the firm devote adequate advertising and other support to insure a successful event, and that it purchase an incremental amount of American products proportionate to the promotional assistance provided by the Commerce Department. For its part the Department will work with any buying team sent to the U.S. by the store and otherwise help facilitate the purchase of U.S. products by arranging contacts with U.S. suppliers and attendance at domestic trade events.

Opening event this year was a $3 million La Standa promotion in Italy, followed by the Galeries Preciados $2 million sale in Spain in February and March. The Nordiska Kompaniet chain of Sweden will have eight weeks of sporting goods, household textiles, apparel, home furnishing, home entertainment and outdoor living promotion in April and May, representing over $1.5 million in purchases. Galeries Anspach in Belgium is featuring this month a full line of Sears products, buying over $300,000 in the States. This month will also witness the opening of the $1.5 million Au Printemps French promotion of U.S. apparel, linens, furs and textiles, and the Kastner & Oehler Austrian sales event featuring another $300,000 in apparel and housewares. These are to be matched by the Far East promotions described above.

When the American Fortnight opens in Hong Kong in October, it will represent the culmination of a buying program of U.S. merchandise that will add up to over $17 million. Sales overseas are expected to be at least three times that amount by the time these promotions are completed.

However, not enough U.S. producers of consumer goods have devoted appropriate time and resources to understand this dynamic market and the many possibilities it offers. The Bureau of International Commerce hopes and expects that attitude will change and that U.S. suppliers will include the Far Eastern as well as the European markets in their long range planning.

Additional data on consumer goods promotions and opportunities in Singapore, Hong Kong, Taiwan, France, Belgium and the United Kingdom will follow in the U.S. Promotions Abroad section each month in Commerce Today.

Details are available on specific contacts at each of the department and chain stores mentioned. Call or write Charles Johnson, Office of International Marketing, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-4705 to be enrolled on the active consumer goods resource list.

SNOOPY EVERYWHERE—*What's popular in America is popular in Japan, say Matsuzakaya store officials, displaying items decorated with characters from Peanuts comic strip.*

Solar Heating, No Longer A Theory, Moves Into The Real Business World

What is believed to be the nation's first full-fledged solar heating system designed for use in a commercial building has been installed in Denver, Colorado.

Built by Solaron Corp. of Denver, the system was built into the $1 million headquarters of the Gump Glass Co.

Solaron is a publicly-held company organized for the sole purpose of developing, manufacturing, marketing and installing solar space heating systems. The same systems may be used for hot water heating and air-conditioning.

Gump Glass, a closely-held family corporation, becomes what they believe is the first commercial business in America to buy a solar heating system for practical use in its own establishment.

Presidents John C. Bayless of Solaron and Jerry Sigman of Gump Glass said the system's installed cost is estimated at $60,000. It includes 1,600 square feet of glass-covered metal solar collectors to be mounted on the roof of the one-story plant, ductwork, heat storage, and automatic controls.

The solar collectors, heat storage, controls, and air handling equipment accounted for about half of the total cost.

The collectors will save a projected 77 percent of annual fuel requirements for approximately 7,180 square feet of office and showroom space in the 41,000-square-foot structure.

Bayless and Sigman describe the project as a "major breakthrough in the practical application of solar heating technology in the commercial/industrial sector.

"Work in the field thus far has been limited largely to demonstration projects in a smattering of residences," Bayless said. "To our knowledge, the only previous commercial applications have been experimental in nature, or limited to heating hot water.

"In no way are we going into this for experimental or prestige purposes," Sigman said. "We are profit-oriented and economy-minded, and we view this as an eminently practical way to assure ourselves of an unlimited source of fuel for as long as we are in business.

"The front-end cost of installation is minimal in the light of sharply-rising costs of conventional energy sources, with every indication that such sources will become ever more scarce as time goes on.

"Not to be overlooked is the fact that we feel we are establishing a milestone in environmental quality control with the installation of a clean, non-polluting source of energy.

"Gump has been in the glass business in Denver for more than 50 years," Sigman added. "Since all solar heating systems depend on glass, we looked to Solaron in our own backyard when we began discussing the feasibility of solar heat for our new building.

"The Solaron system should have as long a life as the building itself, without any maintenance costs whatsoever," Jerry Sigman said. "We feel we are making a practical investment and, at the same time, we are contributing our little bit to the national need for conservation of dwindling fossil fuel resources."

Overnight change

Bayless said solar heating has moved "out of the laboratory and into the marketplace almost overnight" because of the soaring costs of conventional fuels.

"As a result, we have been able to make the transition from an R. and D. (research and development) to an operational mode long before our most optimistic projections," he said. "There really is nothing new about the principles and technology of solar heating; what is new is the price and scarcity of oil, gas and electricity, which almost without warning have made solar heating an attractive and economic alternative."

Solaron's system is based in large part upon the research and development work of Dr. George O. G. Lof, a civil engineering professor at Colorado State University, who in 1943 fitted a house in Boulder with a solar collector system as part of a Commerce Department-sponsored demonstration and, since 1957, has heated his own Denver home maintenance-free with a system he designed.

Now president of the International Solar Energy Society, Lof is a founder, vice president and technical director of the Solaron Corp.

Bayless said computer models of the solar heating system indicate it will save an average of 77 percent of the fuel needs of office and showroom on an annual basis.

A conventional gas-fired forced air heating system will provide supplemental heat to office and showroom areas, while gas space heaters will heat fabrication and warehouse areas.

During periods of normal, sunny weather, the solar heating system will provide up to 100 percent of heating needs. However, during prolonged cloudy periods, he said, the solar collectors may not receive enough solar heat to satisfy the building needs completely, in which case, the additional heating requirements will be supplied by the back-up conventional system.

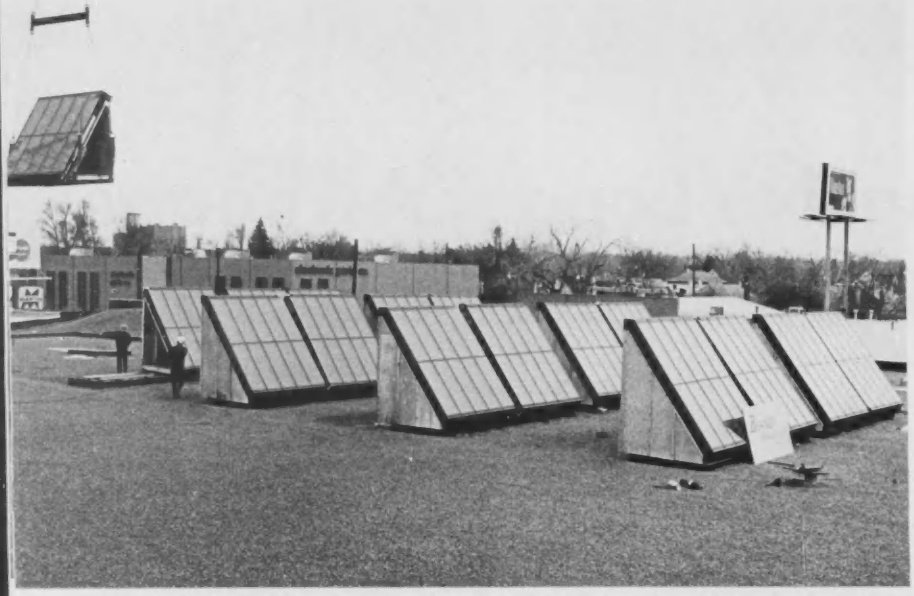
Bayless added that scientific means of adapting the system to other climates already exist, and that each system produced by Solaron is sized to projected weather conditions at the point of installation.

The solar heat collector system on the roof of Gump's headquarters consists of four rows of factory-assembled collector modules mounted facing south in order to receive the winter sun at all times of the day. The panels will be pitched at a 50 degree angle from the horizontal—a slope which Solaron's studies have shown provide the best entrapment of the sun's rays at Denver's geographical position.

The collector panels contain a metal absorber sheet, coated with a special, non-reflective, absorbent black paint, and covered by two panes of glass separated by an insulating layer of dry air.

Circulating air enters the collector panels at the bottom through a cold air manifold. It rises through a duct behind the hot absorber sheet, which heats it. At the top of the panels the heated air is gathered into an insulated duct which carries it into the building heating distribution system or to the solar heat storage unit located in the building's warehouse area.

This storage unit is a bin, eight feet wide, eight feet deep, and 16 feet long, containing about 50 tons of rounded pebbles of uniform size—a medium pro-



LAST OF THE FIRST—*The sixteenth, and final, solar energy collector is lowered into place on the roof of Denver's Gump Glass Co. The firm is believed to be the first commercial operation in the United States to rely on solar energy as its prime heating source.*

viding the most efficient heat storage, according to Solaron's research findings.

Automatic thermostatic controls regulate the flow of heated air from the collectors on sunny days, through ducts to the office and showroom as required. At other times, the air is drawn through the heat storage unit to be heated before distribution to the building.

Power plant design

Taking the solar process still further, the Energy Research and Development Administration is seeking proposals from industry for designs of a ten-megawatt solar power plant.

Responses are to be submitted by April 29. Over a period of about two years, the selected projects are expected to lead to several preliminary designs of the pilot plant. Then a final design will be selected for fabrication, construction and testing. The plant is expected to be in operation in four to five years in the Southwest.

This solar thermal power plant, which will use the central receiver concept, is considered one of the most economical approaches to production of electricity by solar thermal conversion. The collector field will consist of an array of controlled heliostats, or mirrors, which will continuously reflect solar radiation to an absorber-boiler atop a tall tower. Fluid in the boiler will be converted to a high-temperature vapor, such as steam, which will be expanded through a turbine to run electrical generators.

Excess collected energy in the form of hot fluids can be stored in an insulated tank for use when the sun is not shining.

Once in operation, the solar thermal pilot plant will be used to check the predicted performance and operating characteristics of the system and to project the economic viability of the larger, commercial-size power plants.

An upcoming FEA report covering all federal activities in the solar energy area between July 1973 and January 1975 says that "obstacles to the widespread utilization of solar energy include lack of incentives that would help defray capital costs and enable people to take advantage of the free fuel the sun makes available.

"It is estimated," the report states, "that the amount of solar energy falling on the continental United States is roughly 700 times our total energy consumption."

The National Science Foundation has recognized six different applications of solar energy: solar heating and cooling of buildings; photovoltaic electric power generation; wind energy conversion systems; ocean thermal gradient power generation; and bioconversion to fuels. The first three use solar energy directly whereas the last three use solar energy after it has been converted to a different medium. Each of these applications involves a different technology and they are related only by the original source of the energy.

To push solar energy development, 14 federal agencies have sponsored 171 solar projects at a cost of $25.2 million dollars during the 19-month period covered by the report which provides a summary of each project.

About half of this federal effort has been concentrated on demonstrations for the heating and cooling of buildings, with $17 million authorized for expenditure in this area duing fiscal year 1975.

Of the six applications noted above, several show promise of commercial viability by 1980 in special circumstances. Based on research supported by the NSF, solar heating and cooling of buildings is already competitive with electricity in certain regions of the country, and as the price of electricity goes up, the time required goes down for the savings in fuel costs to pay for the high initial cost for the solar energy system. Other solar energy systems which could be in some use by 1980 are photovoltaic electric power generation, wind energy conversion systems, and bio-conversion to fuel. Each of these has already been demonstrated on a small scale and the NSF has planned research and larger demonstration units to explore the commercial viability of these facilities. The Project Independence business-as-usual scenario estimates a savings of 50,000-barrels-per-day or 0.3 percent of petroleum demand in 1980 from these four solar energy applications. While this is not much, it is a necessary first step, in FEA's view.

One agency, the National Science Foundation, has been responsible for 80 percent of the 171 projects and 77 percent of all funds spent. The report shows that NSF's solar budget has grown by 4,000 percent, from $1.2 million in 1971 to an estimated $50 million in 1975.

Much of the federal effort in solar energy development, including that part administered by NSF, has been assumed by the newly-established Energy Research and Development Administration.

Minimal impact

In a related development, the Federal Energy Administration released results of a survey which shows U.S. manufacture of high-temperature solar energy collectors in 1974 was equivalent to only 56 barrels of crude oil per day.

The United States currently consumes about 17 million barrels of crude oil per day.

FEA's 56-barrel-a-day figure for the maximum petroleum energy equivalent of high-temperature solar collectors manufactured in the U.S. in 1974 came from the results of a survey conducted by the agency's Office of Energy Statistics.

A total of 170 firms were identified as possible manufacturers of solar collectors, and each was telephoned to determine square footage of high- and low-temperature solar collectors produced and sold in 1974. Only 39 were actively engaged in production. These produced a total of 136,540 square feet of high-temperature collectors in 1974. About 18,000 square feet of this was used to equip four public schools. If applied to space heating, the remaining square footage could provide power to heat about 220 houses.

FEA's Solar Report will be available to press and public in mid-May.

Energy Management Digest

COMMERCE MOVIE...Commerce's Office of Energy Programs has produced a 20-minute color motion picture detailing the critical need for energy conservation by business and industry. Stressing the importance of management providing adequate resources to do the job, the film uses recent case histories taken from the private sector to illustrate the four crucial steps in energy management: organizing management resources; conducting an energy audit; setting tough and measurable goals, and launching the campaign. Copies of the film are available in 16mm. or videotape cassette format for $250. Brochures for distribution at showings are 25 cents apiece. Write Commerce's Office of Energy Programs at Washington, D.C. 20230.

UNIMPAIRED GROWTH...The nation can significantly reduce its growth rate of energy use without damaging the economy, according to a recently-released Conference Board analysis. The continuing introduction of energy-saving equipment in industry and the chilling effect of high prices are likely to produce sizable cutbacks in the use of energy over the next decade, concludes Dr. John G. Myers, director of The Conference Board's Energy Information Center: "The forces of Technological change and response to higher prices are quite likely to produce a much lower rate of growth of energy use in the next ten years. Energy use and economic growth are certainly not independent of one another, but the link between them is more elastic than is commonly assumed, provided time is allowed for the necessary adjustments in production and consumption that will permit less energy to be consumed per unit of product."

STATE ENERGY OFFICES...Citizens needing information on energy programs in their states can now refer to the FEA publication, State Energy Organizations: A Catalog. It lists addresses, phone numbers, functions, key personnel, major activities and publications produced by energy offices in all 50 states. Single free copies are available from FEA's National Energy Information Center, Washington, D.C. 20461.

PIPELINE BEGINS...The first stretch of pipe for the 798-mile Trans-Alaska pipeline was installed March 27, the initial link in a system that will ultimately pump two million barrels of oil daily from Prudhoe Bay to the pipeline's southern terminus at Valdez. The 1,900 foot-long section of pipe was laid beneath the Tonsina River, about 75 miles north of Valdez. The Tonsina is one of the 34 major streams to be crossed along the pipeline route. Completion of the pipeline is now set for late 1977. When finished, it will carry petroleum from the oil-rich North slope of Alaska to Valdez and from there south by sea to the U.S. West Coast. One quarter of all U.S. oil reserves may be located in Alaska.

SPANISH EMPHASIS....The Federal Energy Administration has published a Spanish language booklet of tips on conserving energy and money in the home and on the road. The booklet is part of a series of FEA public information materials in Spanish. The Agency also provides a weekly column, "A New Outlook on Energy," to more than 50 Spanish language newspapers and magazines in the United States and Puerto Rico. On the average day, Americans waste more energy than all the countries of South America consume. The tips in the new publication, Como Economizar Energia y Dinero en Su Hogar, show how to eliminate this needless waste. Single free copies may be obtained from Consumer Information, Pueblo, Colo. 81009. Requests for more than two copies should be addressed to the Federal Energy Administration, C&PA, Room 222-B, Washington, D.C. 20461.

GASOLINE FACTS...A ten-page FEA gasoline fact sheet has been designed to help policy-makers evaluate various petroleum conservation measures. Among other things, it notes that (1) gasoline accounts for 39 percent of domestic petroleum use, with automobiles, trucks and buses using 29 percent (private autos use 23 percent); (2) more than 40 per-

cent of private auto travel is related to earning a living, while only 35 percent is used for social and recreational travel; (3) there are wide regional differences in per capita gasoline consumption; and, once again, (4) the poor spend a much higher proportion of their income on gasoline than the more affluent. Copies are available from the Press Room, Off. of Communications and Public Affairs, FEA, Wash., D.C. 20461 (202-964-3538).

NUCLEAR ENVIRONMENTAL IMPACT...The Nuclear Regulatory Commission is establishing a new division to direct research attention on environmental, nuclear fuel cycle and safeguards matters. Chairman William A. Anders said the new division is "the most important environmental step we have taken in our brief existence." The new division, which will be part of the NRC's Office of Nuclear Regulatory Research, will include a full range of scientific disciplines related to environmental, nuclear fuel cycle and safeguards research. Work will be conducted on the health and environmental aspects of nuclear energy, facility safety assessment, disposal of waste and transportation of radioactive materials.

ENVIRONMENTAL SEMINAR...A May 29-30 seminar on energy and the environment will try to provide management of energy-oriented firms with a broad outlook on the whole energy scene. Subjects for discussion at the Harvard Club conference will include Energy R&D, Capital Requirements, Environmental Considerations, Legal Aspects, Alternative Solutions, Energy Conservation and Environmentally-Related Markets. Contact Jeff Swartz, Frost & Sullivan, 106 Fulton St., New York, N.Y. 10038 (212-233-1080).

ENERGY SEED?...The Energy Research and Development Administration has awarded a $1.7 million contract to Montana Energy and MHD Research and Development Institute of Butte to develop engineering data on MHD (Magneto-hydrodynamic) generators and systems. In MHD power generation, coal is converted to a high temperature gas (4,500 to 5,000 degrees Fahrenheit). A seed, such as potassium carbonate, is added to the hot gas--called plasma--to make it electrically conductive. As the plasma moves at a high velocity through a magnetic field it produces electricity. The work involved will be theoretical and experimental in nature and generally directed toward the acquisition of engineering data to be used in developing MHD power generation.

RESILIENT BUMPERS...Flexible bumper systems with large plastic components may be one way of cutting back on fuel usage while warding off impact damage to automobiles. The bumper system of the 1975 Chevrolet Monza 2+2 won this year's Society of Plastics Engineers Grand Award for use of plastic in a resilient retainer which absorbs front-end impact and helps the urethane nose bounce back into shape. The retainer weighs about four pounds--or about one-third the weight of a similar steel part--helping to maintain body appearance while saving fuel through lower weight. More than 300,000 are being installed on various sporty GM models this year.

RECRUITING IDEAS...FEA is entering a series of funding agreements totaling almost $1.2 million with state and local governments to promote greater efficiency in generation and use of electric power. These agreements are designed to demonstrate immediately, in actual utility systems, the feasibility of non-traditional electric power rates, load control techniques, and utility-sponsored conservation programs. The agency has over the past several months received 32 proposals for demonstration projects from 26 states and 6 municipalities. The four or five most promising proposals will be implemented in pilot projects before the end of June. FEA is inviting additional proposals for test projects to be funded in the fiscal year beginning July 1.

PEAK POWER PLEA...In California, the Federal Energy Administration has filed its first brief intervening in a state utility rate case in support of differential pricing for peak and off-peak periods, with peak load prices sufficiently much higher to discourage usage and pay for the generating capacity needed to meet peak demand loads. It also will intervene in a similar New York case at the invitation of that state's Public Service Commission. Adoption of such practices would be expected to substantially benefit consumers who curtail their energy usage during daytime business hours.

Minority Entrepreneurs Answer Local Needs With Motel, Janitorial Service

A couple of minority-run businesses that are pushing toward a combined $1 million yearly gross demonstrate that blacks are finally beginning to get their share of the American dream. With the aid of financial advice from Commerce's Office of Minority Business Enterprise, a motel in Grambling, La., and a janitorial service in San Antonio, Tex., are achieving success in some highly competitive areas.

Mention Grambling and most people think of football. That's because predominantly black Grambling State University produces professional football players out of all proportion to its size. But no place can survive on reputation alone. About 250 citizens of the town in Northeastern Louisiana have pooled their resources to develop a business venture consisting of the Grambling Motel, an adjacent restaurant, and the Big G Supermart and Grocery Store.

As of last October, the motel and restaurant were operating at a deficit. Since then, with the help of OMBE's Dallas Regional Office and the OMBE-funded National Information Research League of Shreveport, La., it has been practically a full house for both motel and restaurant, bringing needed jobs and revenue into the area.

New managers trained

Under the direction of OMBE's Local Business Development Organization, necessary changes were made in the operations of the motel and market. A $50,000 OMBE grant will help pay for a contractor to train efficient managers, set up management systems, and bring in consultants.

When the Southern Conference of Black Mayors held its Biannual Convention in Grambling recently, the mayors, other politicians and high government officials were registered at the modern, 72-room motel, which provides facilities for many convention activities.

Last fall the citizens of the parish (county) in which Grambling is located voted in the sale of alcoholic beverages. This prompted the motel owners to open a nightclub and cocktail lounge on the premises, which is proving quite successful.

USAF program gave impetus

The U.S. Air Force's pre-separation "Project Transition" shares credit with OMBE for starting Robert Daniels on the way to a successful business. The black entrepreneur founded the Excell-O Janitorial Service upon retiring from the Air Force a little over a year ago.

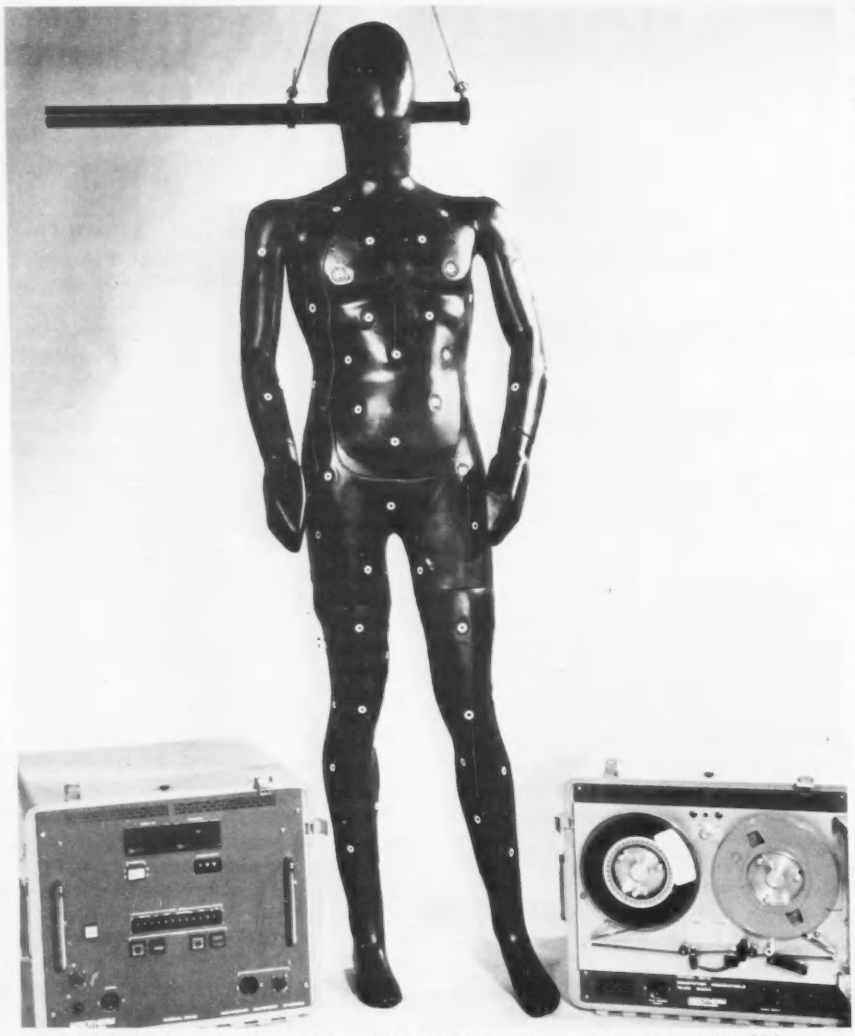
OMBE's San Antonio Business Resource Center helped Daniels and partner Clarence Rivers obtain a $123,000 contract to clean Veterans Administration and Treasury Department facilities in Austin, Tex.

Daniels decided to go into the janitorial service business as a result of two chance conversations. In 1962 he met a man in Anchorage, Alaska, who had just started such a service. A decade later he ran into the man's partner in Japan and learned that the Anchorage business was grossing $750,000 a year. This was just the incentive he needed to select his post-Air Force career.

Excell-O now employs 41 people who clean the two government buildings in Austin and a professional and medical building in San Antonio. Currently Daniels is looking for new sources of financing to enable him to go after three more major contracts.

These are just two of the many minority enterprises for which OMBE services have provided a needed lift on the road to success.

CHECKING IN—*The new Grambling Motel in the Louisiana town of the same name is part of a complex owned and managed by minority entrepreneurs.*



SENSITIVE DUMMY—*Thermo-Man, duPont's life-size test mannequin contains 114 temperature sensors (white rings) to record likely burn injury in flammability tests. Computer system translates results at rate of some 20,000 measurements per minute.*

Flammability, Consumer Preferences Concern Apparel Makers At Forum

The extent of government regulation of consumer options and fabric flammability was the main topic of concern at Technical Forum I, held recently in a Washington, D.C., suburb under the sponsorship of the American Apparel Manufacturers Association.

Representatives of the textile and apparel industries, university and government scientists, and officials of the Consumer Product Safety Commission joined in two days of panel discussions to share their sometimes differing views. The first day's discussions concentrated on consumer response to apparel performance, including success of washing/cleaning labeling and customer dissatisfaction as reflected in returns, and the relationship of fabric properties to apparel quality. The second day covered flammability testing and regulatory and product liability activities under the Flammable Fabrics and Consumer Product Safety acts.

Industry spokesmen said that if individual states continue to introduce legislation governing flammability standards, an impenetrable web of varying regulations may be created. To prevent this, they urged that new national legislation on flammability standards contain federal preemption provisions.

Industry officials also stressed the need for better consumer education, both in how to avoid the type of situation that cause fires and in understanding the purpose of flame retardant garments and the reasons for the price differential with untreated garments.

A highlight of the session was a slide show by Dr. James A. Bercaw, of E. I. duPont de Nemours & Company, of his firm's flammability testing. DuPont uses Thermo-Man—an instrumented, life-size mannequin that can measure potential skin damage from flames and heat. One hundred and fourteen heat sensors are embedded in the mannequin to record heat flow and intensity to a degree never before possible. Computers translate the data from the sensors into a record of skin surface and tissue temperature and damage at varying depths and over precise body areas. The mannequin is used to simulate real-life situations where the immediate behavior of the victim will have an effect on the extinction of flame and depth of burn. According to Dr. Bercaw, duPont hopes that information gathered from Thermo-Man will assist in developing improved fiber products to be used in wearing apparel. Thermo-Man was developed originally for U.S. military studies of protective clothing.

Census Data Give Details On U.S. Retail Business

Final tabulations of the 1972 Census of Retail Trade show the nation's 1.9 million retail establishments had sales totaling over $459 billion in that census year.

The tabulations also show that 1.3 million retail establishments with payroll had a total of 11.2 million paid employees (full and part time) in mid-March, and that these establishments had a 1972 payroll of $55.4 billion. Measured in dollar value of sales, grocery stores were the most important kind of retail business, followed by new car dealers and department stores.

These are among the figures which will appear in the final United States Summary of the census which will be issued shortly by Commerce's Bureau of the Census.

The final report will have material summarized from the individual state reports, which were issued on a flow basis over the past several months.

The Census of Retail Trade is one of seven canvasses of economic activity in the United States which, taken together, are called the Economic Censuses and are taken every 5 years in the years ending in "2" and "7." The other canvasses are the censuses of wholesale trade, of selected service industries, of manufactures, of mineral industries, of construction industries, and of transportation.

Announcements and order forms for reports of the Economic Censuses may be obtained from the Subscriber Services Section (Publications), Social and Economic Statistics Administration, U.S. Department of Commerce, Washington, D.C. 20233.

U.S. Households Getting Smaller, Heads Becoming More Diverse

Recent increases in the number of people living alone, coupled with a declining birth rate, have led to a decrease in the size of the average U.S. household . . . and American marketers will have to adjust their sights accordingly.

Between 1969 and 1974, the average number of persons living in the U.S. household fell from 3.19 to 2.97, according to a just-released report from Commerce's Bureau of the Census.

The report, based on a nationwide survey conducted in March 1974, notes that in the same five-year span the median age of household heads dropped by almost one full year—from 48.1 to 47.3 years.

Bureau demographers say this age shift was expected and reflects the movement of persons born in the years of large population growth after World War II into young adult ages, and the movement of the relatively small number born in the 1930's into middle adult ages.

Less predictable has been the change in type of household. Since 1969 there has been a decline in the proportion of regular families and an increase in the proportion of primary individuals—persons who live alone or with other persons not related to them. In 1974, nine of every ten primary individuals lived alone in their own home.

The higher proportion of young household heads living alone or with non-relatives is probably the result of young adults remaining single for longer periods, while for older ages the increase is associated with high levels of divorce, separation, and widowhood, the report says.

At the same time, the proportion of young married couples who have children in their homes has declined, and those with children tend to have fewer. In 1974, about 28 percent of all married couples with the husband under 35 had no young children living with them, compared with the 1969 level of 24 percent. During that five-year period, young couples with one or two children increased from 52 to 55 percent of the total, while those with three or more dropped from 24 percent to 17 percent.

It is sometimes assumed that all families headed by a man or woman with no spouse present are single-parent families. In 1974, only 54 percent of these families had children of the head of the household living with them. The definition of the term "family" is such that while these units may consist of parent-child groups, they may also be made up exclusively of other relatives of the household head, such as brothers and sisters, or grandparents.

The report presents detailed statistics on the characteristics of households and families in the United States including age of household heads, distribution of households by type and size for regions, young married couples by presence of children and age of husband, and families other than husband-wife groups.

Copies of *Household and Family Characteristics: March 1974, Series* P-20, No. 276, are available for $1.55 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce District Offices.

New Report Combines U.S. Population Data; To Be Issued Yearly

Commerce's Bureau of the Census has inaugurated a new series of reports which gathers together for the first time in one publication a wide range of statistics about the people of the United States for a given year.

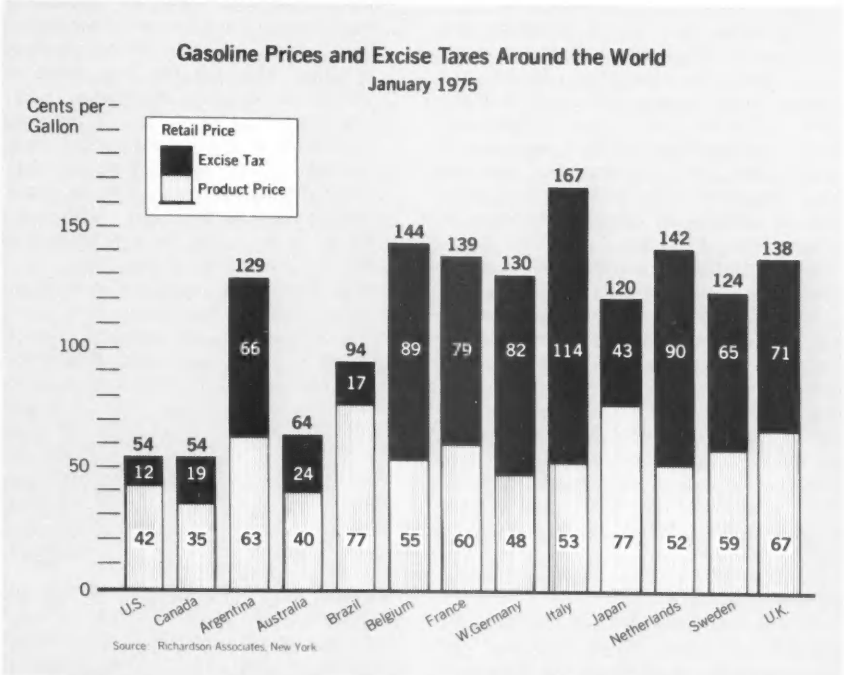
The Bureau, part of the Commerce Department's Social and Economic Statistics Administration, plans to publish a similar report shortly after the end of each succeeding calendar year.

Major sections in the 1974 report are called Population Growth, Social Characteristics, Population Distribution, Employment and Income, and Ethnic Groups. Key findings summarized in the report include:

- The population of the U.S. grew by only three-quarters of one percent during 1974, as declining birth rates reached a new low level of 14.8 per 1,000 population;
- The average size of households reached a new low of 2.97 in 1974, and an increasing proportion of households is maintained by young, unmarried adults living alone, and
- Population growth in metropolitan areas during 1970-74 slowed down to about the rate in nonmetropolitan territory. More whites are moving to the South, and fewer blacks are leaving that region.

The sections dealing with the social and economic characteristics of the population based on findings of the Current Population Survey taken during 1974. This survey is the oldest and largest of its kind in the world. Conducted every month since mid-1942, it covers a scientifically-selected sample of the population across the nation through some 45,000 household interviews each month, and provides accurate data about the people of the United States in the years between the decennial censuses.

Copies of *Population Profile of the United States: 1974*, Series P-20, No. 279, are availabel for 90 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce District Offices in major U.S. cities.



GLOBAL VARIETY—*World motorists were paying these prices for gasoline in January.*

Industry Highlights

Industries Keep Sharper Eye On Non-Ferrous Metal Supply

(Industry Highlights is prepared by the Office of Business Research and Analysis, Bureau of Domestic Commerce.)

The recent shortages of many essential materials have pointed up the need for U.S. businesses to anticipate possible supply problems, says James M. Owens of Commerce's Office of Business Research and Analysis.

In assessing the supply outlook for non-ferrous metals during the coming five years, Owens says that the growing national and global long-range resource availability appears to be resulting in an increasing interdependence of buyers and sellers. This trend is probably one of the most important outgrowths of the recent shortage experience and the subsequent economic downturn.

Manufacturers now appear to be making more product decisions on the basis of supply availability, instead of on the basis of saleability. Improved planning, the emphasis on purchasing management, even consumer participation in materials producing projects will all go a long way toward evening out some of the effects of violent cyclical changes upon both consuming and producing industries.

Guard against complacency

The recent memory of shortages and rising prices should warn against complacency over future supplies. Despite the present oversupplies and weak demand affecting most nonferrous metals and despite expectations of new capacity in copper, zinc, and secondary lead over the next five years, major problems and uncertainties exist which could easily alter the supply-demand balance.

These fundamental problem areas include:

Capital availability—The mining, smelting, and refining industry is facing severe problems in raising the huge sums required for new capacity investment. The recent state of world equity markets and the effect on new debt issues is causing an increasing dependence upon internal financing. Although not unique to materials producers, this trend has created special problems for an industry that is so capital intensive. Inflation has also taken its toll on the cost and competitiveness of new capacity.

Nonferrous demand and the business cycle—The extreme dependence of the metals industry upon prices for profitability and the effect of demand downturns on prices themselves severely hamper the ability to expand capacity. This feast-or-famine pattern is generally characterized by an inability to satisfy demand in peak periods and by stiff price competition, costly inventory buildups, and uneconomic curtailments during down times.

Exploration and development — Although exploration and development continue, there has been a sharp decline worldwide compared to the levels of the late 1960s and early 1970s. This decline, if not corrected, will undoubtedly curtail new metal capacity that otherwise would have been added.

Uncertain investment climate—The threat of nationalization in developing countries and the growing trend of economic nationalism in most of the raw-materials producing countries of the world have been manifested in:

—A rising interest in producing and exporting value-added items which could affect raw materials availability as well as competition in intermediate and finished products

—Government policies in the producing countries, particularly those involving taxation, that impact upon profitability and investment in new projects, and

—The increasing trend by producing countries to join forces to maximize their export revenues by controlling supplies. Although this last threat is viewed as minimal in copper, lead, and zinc—because of the U.S. position and because of the nature of these markets—an awareness of the potential effect on international prices for these commodities is necessary, while the threat is very real in raw materials for the production of aluminum.

Aside from these basic problem areas, the supply-demand balance in most nonferrous metals can be changed almost overnight by events over which this country has little control. For example, natural disasters, labor problems, and political activities by producing countries all contributed to the dislocations suffered in copper during 1973. The international nature of all nonferrous metals markets makes it necessary to consider global supply and demand in order to understand the U.S. situation.

Copper: The U.S. Bureau of Mines estimates world copper reserves in the neighborhood of 393 million tons, with another 400 million tons in hypothetical resources located near known deposits, an additional 320 million tons in speculative resources to be found in areas not yet explored, and 380 million more estimated in subeconomic deposits, including deep sea nodules found on the ocean floor.

During the years 1969-72, refined copper output in the non-socialist world exceeded consumption by an average of 229,000 tons, or 3.4 percent. However, in 1973, an 11 percent jump in total consumption was matched against only a 4 percent increase in refined copper production, causing a 216,000-ton shortfall in the Western World. Similarly, the United States suffered a deficit of 133,000 tons in 1973, as refined copper usage rose by 8 percent while production increased by less than 1 percent.

Although data for the entire year are not yet available, it can be reasonably expected that non-socialist world consumption in 1974 was off by at least 10 percent, reflecting the sharp decline in economic activity in the United States, Japan, and Western Europe. Copper consumption has been especially hard-hit by conditions in the housing and automotive markets, as well as curtailed capital spending plans by the utility industry which has affected copper wire and cable demand.

After being drawn down to 298,000 tons by the end of November 1973, world stocks of refined copper climbed at an increasing rate to more than 600,000 tons by the end of 1974. Similarly, London Metal Exchange (LME) prices have fallen rapidly and sharply.

Widespread cutbacks

The sharply reduced demand, rising producer inventories, and lower prices are all significant from the standpoint of future capacity plans and even in the context of current production. With much of the world's production near or even below the average break-even point for several months, cutbacks in mine output are becoming increasingly widespread.

Based on current demand projections for an annual, compounded growth rate of 4 percent—both domestically and worldwide—huge surpluses can be anticipated in the 1975-1980 period if existing expansion plans are all carried out. These surpluses could rise to as high as 1 million tons in 1977 and 1978. However, while nearly all copper producing countries are currently planning increases in production during the next five years, it is unlikely they will all be realized, considering the current weak market and the consequent financial burdens associated with it.

Moreover, there are some major current uncertainties in the world market which could have an impact on future copper supplies and capacity investment.

There are important questions about potential actions that might be taken by the Intergovernmental Council of Copper Exporting Countries, which represents

Chile, Peru, Zaire, and Zambia. For example, whether the recent agreement by CIPEC countries to withhold exports and production is successful in its goal of stabilizing prices; whether the strategy will be expanded or changed; and whether the present membership will be extended to other copper exporting countries—all are questions that presently remain unanswered. Heavily dependent upon copper for revenue and foreign exchange, CIPEC countries must weigh the painful effects of today's prices against the equally painful decisions of curtailed production and deliveries, or seek alternative marketing strategies.

In addition, a tightness of world smelting capacity relative to mine production threatens both planned and current capacity, presenting some potential problems at the smelter stage of production, as well as contributing to a squeeze of marginal independent miners as the current surplus of concentrates builds.

Environmental regulations

There is still uncertainty in the industry over the nature of final smelter emission standards, since major conflicts still exist between federal and state air standards. Thus, despite massive expenditures by the industry for compliance, uncertainties prevail for existing smelters, as well as for capacity either planned or under construction.

Zinc. Regarding zinc, future demand appears to depend on stable supplies at prices which are competitive with other materials, especially in die casting uses, where the competition is greatest. But it has also been demonstrated in galvanizing markets, where the 1973 supply/price problem was cited as the major cause for steel mills closing galvanizing lines in 1974.

The basis problem affecting supplies has been a shortfall in world production. The United States has been suffering from an even more dramatic dearth of mine and smelting/refining capacity.

Despite the presence of economic domestic zinc reserves, U.S. mine production has declined steadily in recent years, causing a reliance by the U.S. smelting and refining industry upon imported ores and concentrates.

That is only part of the problem, however. Out of 14 domestic metal plants operating in 1969, only seven remained by 1973, resulting in U.S. slab zinc falling by some 50 percent in this short period. One of the closed plants was reactivated in 1973, with production realized in 1974, although total U.S. '74 output also declined due to other losses.

Following an 8 percent increase in Western World demand and a 6 percent jump in U.S. consumption for 1973, zinc demand fell by 14 percent in 1974—led in the U.S. by an estimated 30 percent decline in die casting, principally going to automotive markets. By the end of 1974, the world zinc market had shifted from its deficit position to a surplus, stocks were building, and production cutbacks were becoming more commonplace.

Although somewhat uncertain, the prospects for investment in new smelting and refining capacity through 1980 are good in the United States, although this country is likely to remain a net importer of both metal and raw materials. Worldwide, if present plans for new smelting/refining capacity are realized, some 900,000 to 1 million tons of slab zinc capacity will be added by 1980.

Although a world oversupply is likely to prevail through 1976, it can also be concluded that by 1980 the world will return to a shortfall of 100,000 to 200,000 tons. In addition, it is also doubtful that new mine production will keep up with planned additions at the smelting and refining stage.

Unlike the concentrate surplus in copper, intensified competition for zinc raw materials is expected in the next five years.

Lead. While lead is subject to many of the same problems that affect supply and demand in other nonferrous metals, there are many unique, often paradoxical, features which present special problems in predicting the next five years for lead.

Although the United States possesses an extremely viable and healthy lead mining industry in the Missouri Lead Belt, the uncertainties surrounding future demand for primary lead in pigments and anti-knock compounds used in gasoline have deterred any major expansion plans for primary smelting and refining. Hence, the future of lead supplies appears at this point to lie with the secondary market.

U.S. mine production has doubled since 1965, following emergence of the Missouri ores, while production from primary refineries has also shown a steady growth, except for a downturn in 1971. Yet, probably more than any other nonferrous commodity, lead is extremely vulnerable to cyclical downturns, which cause severe price competition and oversupply—a situation that is largely responsible for the current hesitation to add new capacity in the face of uncertain demand.

Three principal considerations dominate any analysis of lead supplies:

- Uncertainty over the final outcome of EPA regulations phasing down the content of lead in gasoline by 1979, which could influence demand for tetraethyl lead compounds, as well as the ratio of primary to secondary requirements.

The uncertainty increases in light of the debate which is likely to intensify, matching environmental/health arguments against the growing pressure for fuel economy both in cars and in petroleum refining. Certainly a factor here is the President's recent proposal to postpone auto exhaust standards by five years, which could also affect the use of unleaded fuel to service catalytic converters, themselves under recent attack.

- U.S. supplies of imported lead will be affected by the final outcome of an early 1974 Tariff Commission finding of injury against Canadian and Australian suppliers. Imports from these two major sources fell sharply in 1973 and 1974, but it remains to be seen whether this case will be reviewed or whether the present softening market will delay any consuming industry effort to change the dumping ruling.
- The government stockpile has been a substantial source of lead since mid-1972. Although the currently available and authorized material is scheduled to run out during the first half of 1975, authorization of more additional metal excess to stockpile requirements could be legislated.

The uncertainties surrounding tetraethyl lead and the relative healthy future of battery demand increase the likelihood that secondary lead will capture an increasing share of lead supplies, dominating the market by 1980. This conclusion is supported by the almost total absence of major new primary expansions and by the recent decision of one major U.S. company to double its secondary capacity over the next six years.

Aluminum. The continued and anticipated growth of secondary aluminum—particularly as a material for automotive die castings—presents some unique opportunities for automotive manufacturers under pressure to find weight savings.

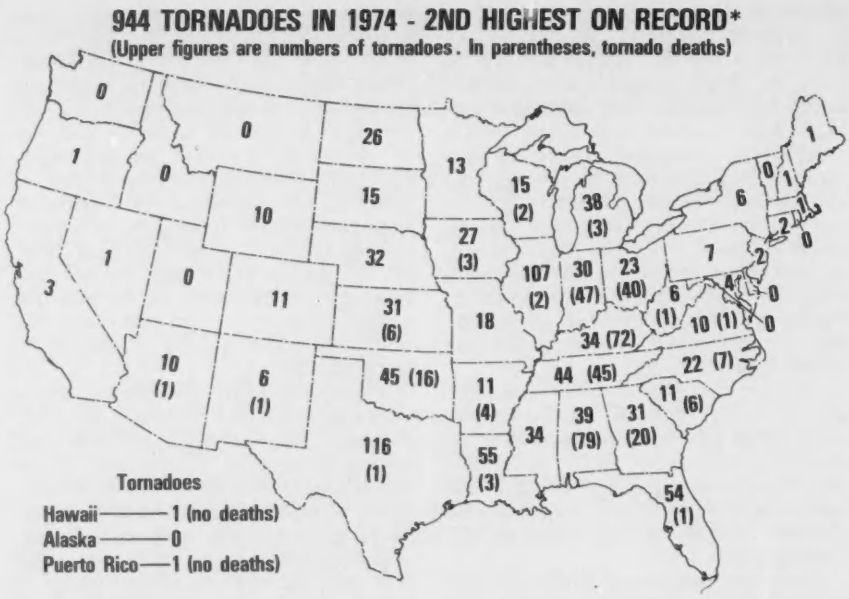
In terms of primary supplies, the industry is actively working—as individual companies and jointly with the U.S. Bureau of Mines—to develop alternative domestic sources of raw materials, while significant gains are being made in achieving power savings.

Magnesium. Magnesium also offers interesting potential for structural applications in cars, although stable supplies and prices have been the greatest drawback. Supplies remain extremely tight worldwide and prices have risen sharply in the past year. Currently, there are three U.S. primary producers, one of them operating at capacity and the other two continuing efforts to bring substantial new production on stream.

With the addition of planned new capacity, including new plants and expansion of existing facilities, production will be more than doubled by 1980.

Clean Fuels From Coal Meeting

The Institute of Gas Technology will conduct a Second Symposium on Clean Fuels from Coal at Chicago's IIT Research Institut from June 23-27.Write: IGT, 3424 South State St., Chicago, Ill. 60616 (312-225-9600).



TORNADOES' TOLL—*The 1974 total of reported tornadoes in the United States was second only to the previous year's 1,108. State-by-state totals add to 955 because 11 tornadoes crossed state lines, according to Commerce's National Weather Service. The record for tornado deaths, 794, was set in 1925. Improved warning techniques have helped reduce the figure.*

Unified Measurement System To Aid Continent's Engineering Projects

Nine Western Hemisphere nations have combined in a program which is expected to result in a modern unified system of precise measurements for the entire continent, according to Commerce's National Oceanic and Atmospheric Administration.

The program will modernize the geodetic works which provide the basis for all accurate distance (horizontal) surveying on the North American continent.

Countries participating in the program include the United States, Canada, Costa Rica, Denmark (Greenland), El Salvador, Guatemala, Mexico, Nicaragua, and Panama. The program is being spearheaded in the United States by NOAA's National Geodetic Network.

Commander John D. Bossler, project manager for the U.S. operation, said modernization of the horizontal network in the 48 conterminous states and Alaska, is expected to be completed by 1983. The task, last performed almost a half century ago, may cost $16 million. It has been estimated, however, that improved accuracy and expansion of the network will reduce survey costs in new construction alone in the United States by 25 to 50 percent at an annual estimated benefit of $20 to $40 million.

When completed, the network will provide an improved base for topographic mapping, navigational charting and large-scale engineering projects.

The U.S. horizontal network, along with a similar national network of elevations, provides an accurate base for the production of topographic maps and navigational charts; the determination of national, state, and local boundaries and private property lines, the planning and construction of highway systems; geologic and hydrographic surveys; the planning of space flights; and irrigation, flood control, and hydro-electric projects, among others.

The hemispheric network will spread a vast geodetic system of precise measurements over a land area of approximately 10,230,000 square miles, extending north from the Danish possession of Greenland, south to Panama, west from the International Date Line in the mid-Pacific and east to within 15 degrees of the meridian at Greenwich, England.

Bossler said that the adjustment of the separate networks of the North American countries involves the recomputation of about 300,000 geodetic survey positions, including an estimated 200,000 in the United States, 8,000 in Canada and 2,000 in Mexico.

Several Central American countries which have not yet joined the program are expected to do so.

Denmark has agreed to extend the horizontal network from Canada to Greenland, a move which is expected to be of great economic benefit to Denmark in the future development of its vast North American island. Surveying of the interior of Greenland, covered with glaciers almost two miles thick, has been sparse until now.

The approximate 200,000 monumented points in the United States horizontal network are geographical sites whose latitude and longitude have been determined and each location identified with bronze plaques, one at the surface and another four feet below. These plaques mark the exact location of each site relative to a central point on Meades Ranch, Kansas, the geodetic center of the United States.

Modernizing the U.S. network will involve re-evaluation and recomputation of some 2½ million land measurements made since 1927, when the network was last updated, to arrive at a new and more accurate determination of latitude and longitude for each point in the network. In addition, a half million field observations will be made to add new points to the network. The use of modern surveying instruments, including those utilizing the speed of light, will result in extremely accurate measurements.

All of the measurements will be placed in a data bank and the result will be a geodetic network as accurate as modern science can make it and which will be adequate for U.S. needs for decades to come.

Maine Gets $328,870 Grant To Study Shoreline Use

An additional grant to Maine from Commerce's National Oceanic and Atmospheric Administration will add $328,870 to the state's efforts to protect its coastline.

The grant, to be matched by $164,435 from the state, is the second of three to be awarded to Maine under the Coastal Zone Management Act of 1972. The first one of $230,000 was made approximately a year ago.

The management program which Maine is developing will attempt to reconcile increasing and conflicting uses of the shoreline for oil refineries, airports, beaches and beach homes, highways, harbors, power plants, wildlife refuges, and commercial service establishments.

Some of the second-year activities will include mapping soils, islands, and natural resources; inventorying marine habitats and lakes in the coastal zone; analyzing offshore policies; designing an administrative program; and polling public opinion on the effect of the program through a series of public hearings and informal meetings.

The State Planning Office has been designated to administer the grant, with portions allocated to several other state agencies for their assistance.

Vets May Overcome Handicaps With Data Processing Skills

Handicapped veterans will have a chance to move back into the economic mainstream of the nation through a new data processing training program being funded by Commerce's National Oceanic and Atmospheric Administration.

Using NOAA funds and with the cooperation of the International Business Machines Corporation, a six-month pilot program has been started at the Veterans Administration Hospital at Hampton, Virginia. If the program catches on, it could be extended throughout the VA hospital system.

NOAA's National Geodetic Survey is financing the $10,000 program because it has 25 million pieces of data which must be processed into a central data bank. The Survey is constantly gathering data from its operations, which involve distance and elevation networks. Processing of data from one current project alone is expected to take five years and cost $2 million. The veterans could boost the program while at the same time gaining valuable skills.

IBM has installed data entry equipment at a special rehabilitation center at the Hampton facility and is training volunteers from among the center's ambulatory patients. The pilot program will determine whether they can operate the equipment with sufficient volume and accuracy to be acceptable to the National Geodetic Survey.

The Federal Government has large amounts of data which must be put in a form readable by a computer. If the VA program succeeds, it could be extended to other VA hospitals capable of conducting similar programs, according to Capt. Leonard S. Baker, director of the Geodetic Survey.

Some attempts have been made in the past by the VA to train handicapped veterans in key punching, but this is the first time it has combined with another agency and IBM to do so. IBM has conducted several successful pilot programs with handicapped persons who are not veterans.

Dr. John R. Scotti, director of the VA hospital in Hampton, was enthusiastic over the pilot program. "This is a new avenue of approach to rehabilitation," he said. "In many cases, it is the reshaping of old skills already possessed by the veterans and the introduction of new skills to others. It is a really mind-broadening and life enriching experience for veterans who take the course, even if they don't go out into the working world."

Frank P. Hadley, the IBM manager of the pilot program, said: "With this class we hope to establish a model by which other training could be given throughout the VA system."

Those desiring to take the training course are first tested as to ability. Prerequisities include the equivalent of a high school education and some typing and good reading skills.

Epoxy Coating Can Prevent Deicing Salt Damage To Bridges

Commerce's National Bureau of Standards has tested 47 different protective coatings in an effort to reduce the $70 million per year cost of repairing highway bridges damaged by deicing salts, and has found four powder epoxies that adequately protect steel reinforcing bars.

The epoxy coatings protect the steel from the chloride ions of deicing salts, seawater or other sources that penetrate the concrete bridge surface, and thus can eliminate the corrosion that causes cracks in the concrete. The coatings are expected to at least double the lifespan of reinforcing bars; corrosion of uncoated bars has seriously damaged bridges in as short a time as five years after construction.

Under a contract with the Federal Highway Administration, NBS scientists tested a variety of coatings for impermeability to chlorides, durability, bonding to concrete, bending without cracking and staying in place under stress. In one test, they embedded epoxy-coated bars in concrete blocks and placed them in a tub of salt water for two years. Even after the two years the bars showed no signs of corrosion.

One reason why epoxy coatings may prove a promising solution to this costly problem is that they are economically feasible. Epoxies consist of two components—a resin component and a curing component—that polymerize when mixed together. (Polymerization is a type of chemical reaction which forms long chain molecules, changing the nature and appearance of the substance.)

Calendar For Businessmen

May 4-6—Ipswich, Mass.—Interconnect Systems conference, IGC Conference Center. For information, Richard D. Murray, Institute for Graphic Communications, 375 Commonwealth Ave., Boston, Mass. 02115 (617-267-9425).

May 4-7—Kansas City—Industrial Development Research Council Annual Workshop/Business Meeting, Crown Center Hotel. For information, IDRC, Peachtree Air Terminal, 1954 Airport Rd., Atlanta, Ga. 30341 (404-458-6026).

May 5-8—Chicago—26th National Plant Engineering and Maintenance Conference, McCormick Place. For information, Clapp & Poliak, Inc., 245 Park Ave., New York 10017 (212-661-8410).

May 6 and 8—Memphis — Advertising Media Workshop (evening), LeMoyne-Owen College. Sponsor: Business Resource Center of Memphis Chamber of Commerce. For information, Mr. Lee Jackson, Memphis BRC (901-525-8481).

May 6-8—New York—Packaging: Planning, Marketing and Design seminar, Delmonico's Hotel. For information, Ms. Heidi Kaplan, Information Services Manager, New York Management Center, 360 Lexington Ave., New York 10017 (212-953-7262).

May 12-14—Washington—Second Energy Technology Conference, Shoreham-Americana Hotel. For information, Government Institutes, Inc., 4733 Bethesda Ave. NW., Washington, D.C. 20014 (301-657-2922).

May 12-14 — San Diego — 29th Annual Technical Conference of the American Society for Quality Control, Town & Country Hotel. For information, Robert W. Shearman, ASQC, 161 West Wisconsin Ave., Milwaukee, Wisc. 53203 (414-272-8575).

May 14-15—New York—Winning Management's Confidence—Public Relations Management Seminars, Biltmore Hotel. For information, New York University Business & Management Program, Room 1517, 310 Madison Ave., New York 10017 (212-682-1435).

May 15-16—San Diego—Solving Quality Control & Reliability Problems With Optics program, Town & Country Hotel. For information, Society of Photo-optical Instrumentation Engineers, P.O. Box 1146, Palos Verdes Estates, Cal. 90274 (213-378-1216).

May 20-21—Gaithersburg, Md.—Successful Experiences in Teaching Metric conference, National Bureau of Standards. For information, Metric Information Office, NBS, Washington, D.C. 20234. (301-921-2658.)

U.S. Trade Share Strengthens In World Markets Despite Adverse Effect Of Oil Imports

The total value of goods imported by the 50 leading U.S. trading partners continued to advance sharply in the latest 12-month period for which data are available, generally November or December. Nearly two-thirds of the countries increased their purchases by at least 40 percent from both the United States and other suppliers, as indicated in the accompanying table.

The geographical pattern of movements in the U.S. share, which has been observed in recent reports in this series, continued in the latest period analyzed. In about 60 percent of the listed countries, the United States improved or maintained its position, with the bulk of the gains occurring in the developing areas and the smaller developed countries. Among the top ten U.S. trading partners, however, the U.S. share improved in only two, while holding even in two others.

Because of the dominating influence of petroleum in total imports, resulting from the huge price hikes imposed by the members of the Organization of Petroleum Exporting Countries, calculations have also been made of imports excluding petroleum, and the U.S. share of these imports, for nearly three-fifths of the countries covered by this report. On the ex-petroleum basis, adjusted imports showed considerably smaller increases and the U.S. position improved in more countries than in the case of total imports. In particular, among the top ten, the U.S. share gained in all but one.

In 1974, the growth in the volume of trade slowed sharply in the second half of the year, mirroring the slowdown in economic activity in almost all industrial nations. While the prices of many industrial raw materials tended to moderate, if not decline, those of many other internationally traded commodities continued to climb as inflationary pressures remained strong despite the downtrend in business activity. Although the rate of rise in petroleum prices slackened, the effect of the steep increases announced previously was to double petroleum's share of most countries' total imports during the year.

To preserve continuity with previous reports, the trade data used here are expressed in U.S. dollars reflecting exchange rates prevailing in each period. As a result, changes based on these dollar values are inflated (deflated) for countries whose currencies have appreciated (depreciated) relative to the dollar. Because of the inclusion of new data on the U.S. share of imports excluding petroleum, the discussion of reserves and related tabular material have been eliminated from this report.

Share rises in Belgium, Switzerland

Among the top ten traders, the U.S. share of total imports advanced in Belgium and Switzerland. Belgium stepped up its arrivals of U.S. goods by more than half, buoyed by greater purchases of nonelectric and also electric machinery, textiles, aircraft, and motor vehicle and tractor parts. In Switzerland, increased imports of chemicals as well as electric and nonelectric machinery more than offset a decline in U.S. aircraft, contributing to a substantial boost in the value of goods received from this country.

In the Netherlands, imports from both the United States and other suppliers climbed by two-fifths, leaving this country's standing unchanged. When Dutch purchases of petroleum are excluded from consideration, however, the U.S. share advanced. Imports of a wide variety of U.S. goods showed strong increases, especially corn, oilseeds, organic chemicals, machinery, and instruments, although aircraft declined. At the same time, the U.S. share of Sweden's total imports also remained at its level of the previous 12-month period, but expanded in non-petroleum imports.

In Japan, the U.S. share of overall imports fell to 20 percent. Although purchases from this country rose substantially, those from other suppliers climbed considerably more rapidly. When petroleum is excluded, however, the U.S. share increased mainly because of sharply higher imports of coal, chemicals, grains, soybeans, and aircraft.

Similarly, although entries of U.S. goods into Italy rose strongly, this country's position weakened, again due to the impact of larger oil imports. Arrivals of U.S. oilseeds, chemicals, corn, and coal were especially buoyant.

Both France and the United Kingdom raised their purchases from the United States by about one-third, but those from other suppliers advanced more rapidly, except if oil is omitted. For France, increases in arrivals from this country consisted mainly of coal, electric machinery, power generating equipment, and office machines, which more than offset a fall in aircraft. At the same time, the United Kingdom reported larger imports of U.S. chemicals, office machines, electric power generating equipment, coal, and textiles.

The U.S. standing weakened in Canada even when petroleum is not part of the share calculation. Imports from this country rose by about one-third but the total from other suppliers went up moderately faster. Arrivals of motor vehicle parts and truck were buoyant, and those of coal, steel, aircraft, organic chemicals, and plastic materials rose substantially.

In Germany, the U.S. share of overall imports declined as arrivals of U.S. goods rose by only 18 percent. Increased purchases of soybeans, corn, chemicals, aircraft, and electrical equipment were partially offset by decreases in wheat, oilcake, and tobacco. When Germany's oil imports are excluded from the total, however, the U.S. position improved slightly.

Among the smaller developed countries, the U.S share rose in Yugoslavia, Finland, and Portugal. In Yugoslavia, the position was boosted by greater purchases of machinery, soybean oil, and animal feedstuffs; in Finland, by nonelectric machinery; and in Portugal, by corn, wheat, and aircraft. Conversely, in Australia and Spain, the U.S. position in total imports weakened despite steep increases in purchases from American suppliers. Australia stepped up its imports of U.S. chemicals, power generating equipment, internal combustion engines, and auto parts, while Spain purchased more corn, soybeans,

power generating equipment, and coal. Excluding petroleum, however, the U.S. standing improved in both countries.

In the majority of the developing countries, the U.S. share of total imports generally moved upward. Larger purchases of American wheat provided the impetus for the gain in Morocco. In Taiwan, the position was strengthened by increased arrivals of nonelectric machinery and aircraft, and in Hong Kong by cotton and electronic components. At the same time, the U.S. standing also advanced in Indonesia, Peru, and Egypt.

In contrast to these gains, there was a fractional decline in this country's position in Mexico, its largest developing market. Mexican imports from this country, nevertheless, climbed by nearly half, spurred by machinery, iron and steel, organic chemicals, and corn. Similarly, the U.S. standing declined in Singapore and Korea despite larger purchases by both of U.S. electronic components. In addition, Singapore reported increased imports of American construction and mining equipment and Korea of steel scrap and cotton.

In the table below, attention is called to the fact that in the import change columns at the right, the percentages refer to total imports, including petroleum.

World Market Report

The 50 markets shown below accounted for 91 percent of 1973 imports into all free-world markets and 91 percent of imports from the United States

Values in millions of dollars — Published quarterly

Importing country	1973 Imports				1974 Imports January through latest month					Import change in latest 12 months*	
	From world	From U.S.	U.S. share %	U.S. share excl. oil %	Latest month	From world	From U.S.	U.S. share %	U.S. share excl. oil %	From world %	From U.S. %
Germany, West	54,496	4,581	8.4	9.4	Dec.	68,962	5,415	7.9	9.6	+ 27	+ 18
United Kingdom	38,843	3,970	10.2	11.4	Dec.	54,141	5,276	9.7	12.1	+ 39	+ 33
Japan	38,347	9,288	24.2	29.4	Dec.	62,067	12,681	20.4	31.0	+ 62	+ 37
France	37,399	3,089	8.3	9.2	Dec.	52,866	4,111	7.8	[1]10.2	+ 41	+ 33
Italy	27,797	2,304	8.3	9.5	Nov.	37,149	2,804	7.5	10.1	+ 52	+ 35
Canada	24,817	16,943	68.3	71.5	Dec.	34,501	22,360	64.8	71.1	+ 39	+ 32
Netherlands	24,723	2,122	8.6	9.8	Oct.	28,346	2,398	8.5	10.0	+ 40	+ 40
Belgium-Lux.	21,991	1,258	5.7	6.1	Dec.	29,516	1,930	6.5	[1]7.5	+ 34	+ 53
Switzerland	11,677	737	6.3	6.8	Dec.	14,434	945	6.5	7.2	+ 24	+ 28
Sweden	10,625	705	6.6	7.4	Dec.	15,837	1,041	6.6	7.9	+ 49	+ 48
Spain	9,595	1,545	16.1	18.2	Dec.	15,396	2,376	15.4	[1]20.8	+ 60	+ 54
Denmark	7,711	515	6.7	7.4	Dec.	9,873	599	6.1	7.4	+ 28	+ 16
Australia	7,654	1,718	22.5	23.3	Oct.	10,395	2,142	20.6	22.3	+ 70	+ 62
Austria	7,119	218	3.1	3.2	Dec.	9,021	259	2.9	[1]3.2	+ 27	+ 19
Brazil	6,998	2,005	28.6	33.3	Sept.	10,169	[2]	[2]	[2]	[3]+ 46	[3]+ 50
Norway	6,239	386	6.2	6.7	Dec.	8,414	686	8.2	[1]8.9	+ 35	+ 78
Hong Kong	5,631	719	12.8	13.1	Dec.	6,773	917	13.5	[1]14.9	+ 20	+ 28
South Africa	5,182	836	16.1	16.2	Sept.	5,750	949	16.5	16.5	+ 54	+ 54
Singapore	5,063	765	15.1	17.3	Nov.	7,716	1,088	14.1	18.4	+ 69	+ 59
Yugoslavia	4,511	187	4.1	4.4	Nov.	6,845	340	5.0	5.5	+ 68	+ 80
Finland	4,346	203	4.7	5.2	Dec.	6,807	348	5.1	[1]6.1	+ 57	+ 71
Korea, Rep.	4,240	1,202	28.3	30.5	Nov.	6,251	1,586	25.4	29.7	+ 65	+ 52
Mexico	4,146	2,605	62.8	67.3	Sept.	4,266	2,645	62.0	67.4	+ 49	+ 47
Taiwan	3,779	954	25.2	26.3	Nov.	6,294	1,576	25.0	27.8	+ 88	+ 99
Greece	3,428	283	8.2	12.6	Nov.	3,923	298	7.6	[2]	+ 30	+ 14
Iran	3,370	473	14.0	14.1	Mar.	1,057	138	13.1	13.1	+ 39	+ 10
India	3,201	557	17.4	20.2	May	2,258	223	9.9	[2]	+ 78	+ 85
Portugal	3,073	252	8.2	8.4	Dec.	4,496	400	8.8	[1]11.6	+ 46	+ 59
Israel	2,987	565	18.9	20.3	Nov.	3,802	680	17.9	[2]	+ 40	+ 32
Ireland	2,793	192	6.9	7.3	Dec.	3,807	247	6.5	[1]7.0	+ 36	+ 29
Indonesia	2,347	442	18.9	19.2	June	1,745	304	17.4	18.1	+ 59	+ 63
Argentina	2,235	477	21.3	22.8	Mar.	633	110	17.3	[2]	+ 27	+ 34
New Zealand	2,181	263	12.1	13.0	June	1,618	203	12.5	[2]	+ 68	+ 82
Algeria	2,136	175	8.2	[2]	Dec.	3,715	[2]	[2]	[2]	[3]+ 45	[3]+ 70
Turkey	2,099	185	8.8	9.9	Dec.	3,778	350	9.3	[2]	+ 80	+ 89
Malaysia, West	2,083	171	8.2	8.8	Oct.	2,954	272	9.2	10.3	+ 77	+ 82
Thailand	2,057	291	14.1	15.9	June	1,585	199	12.5	15.4	+ 66	+ 48
Nigeria	1,862	191	10.3	10.4	Dec.	2,734	[2]	[2]	[2]	[3]+ 24	[3]+ 22
Philippines	1,767	501	28.4	31.7	Dec.	3,452	819	23.7	[2]	+ 95	+ 63
Morocco	1,101	118	10.7	11.4	Oct.	1,555	165	10.6	12.2	+ 76	+121
Peru	1,026	306	29.9	31.8	Sept.	1,120	359	32.1	[2]	+ 52	+ 60
Pakistan	951	228	24.0	26.0	Nov.	1,553	376	24.2	27.7	+ 72	+ 71
Egypt	914	115	12.6	12.9	May	307	27	8.9	9.2	+ 20	+ 82
Trinidad, Tobago	778	124	15.9	15.9	Aug.	1,110	129	11.6	11.6	+ 87	+ 37
Viet-Nam, Rep.	656	304	46.4	[2]	Sept.	631	408	64.7	[2]	+ 22	+ 55
Ecuador	532	173	32.5	33.1	June	419	[2]	[2]	[2]	[3]+ 62	[3]+ 75
Panama	489	172	35.2	43.3	June	383	[2]	[2]	[2]	[3]+ 12	[3]+ 13
Costa Rica	455	160	35.2	38.7	Mar.	148	55	37.5	[2]	+ 33	+ 42
Guatemala	431	136	31.5	[2]	June	307	98	31.9	[2]	+ 53	+ 64
El Salvador	371	111	30.0	31.9	Sept.	410	[2]	[2]	[2]	[3]+ 33	[3]+ 46

Note: The countries shown above include the 50 major importers of U.S. merchandise in 1973 for which current data are available. In order to present comparable statistics for all countries, import data have been adjusted from an f.o.b. to a c.i.f. valuation for Australia, Canada, Philippines, and the Republic of South Africa. U.S. percentage shares excluding petroleum are based on each country's imports from the world adjusted to exclude imports of petroleum and products.

* Compared with preceding 12 months. [1] Estimated. [2] Not available. [3] Import change from the year 1972 to the year 1973.

Source: Official trade statistics of listed countries.

Timber Equipment Mission Assesses 3 African Markets

A new balance in business prospects in Central Africa—better price competitiveness for U.S.-made equipment and improved tariff treatment versus European suppliers, set against currently depressed general economic conditions—has been reported by a U.S. timber industries trade mission.

Ivory Coast, Gabon, Cameroon—their coastal forests are among their most important assets. All three are developing countries, all French-oriented: they are moving away from dependence on European help. All three need to export, but their forest-related activity is depressed—largely because of the construction slowdown in Europe. Mission Director Harvey W. Branigar, Jr., of Union Camp Corp., Wayne, N.J., offers a wrap-up comment on each:

For the long term, Cameroon may provide the strongest opportunities for timber industry equipment sales. Voest Alpine, an Austrian company, has announced plans to construct a large pulp and paper mill, some 50 miles from Douala, which should markedly affect the country's economy and strengthen the demand for equipment. Cameroon at present relies on agriculture and wood for exports.

Gabon has more immediate prospects, a more diversified economy, and the best natural resources—mineral and petroleum—to provide earnings for equipment purchases. The large SOGACEL paper pulp mill, expected to be under construction within the next year, will add considerably to the country's prosperity.

Ivory Coast, the most "business-like," has the most readily available sources of information and help.

The U.S. group spent several days each in Abidjan, Ivory Coast; Libreville, Gabon; and Yaounde and Douala, Cameroon. The firms represented are suppliers of equipment for both logging and processing: lift trucks, loaders, skidders, cranes, tractors, hauling systems, road rollers, chain saws, portable generators, chip transport and dumping equipment, sawmill machinery, and a prepackaged sawmill with accessories.

A mission participant, upon his return to the United States, assessed the market for his company's product this way: "Lower price and better quality equipment, in addition to sustained sales effort, should allow us to secure 10 to 20 percent of the log trailer market within two years, and more after that." Said another, "Our basic objective was to find 'new business prospects.' We found more than we can handle." And still another com-

mented: "We have received positive assurance we will be visited by at least one principal from a company in Yaounde and one from Douala."

People who came to the mission members for interviews ranged from those who were solidly in business to some hoping to get started, or, in several instances, those who had recently received allocations of land with timber cutting rights but as yet had few or no funds, skills, or business experience, Branigar explained. The mission members who were new to these markets viewed their contacts as only the start of an effort that will require time and work before maturing into business—"a fine first step."

Much of the equipment the group saw—during tours to forest and factory—was old and, by U.S. standards, obsolete; but several of the mills and plywood plants visited were "modern and efficient."

Competition is strong—not only French, but other European, particularly German. Duties that formerly were discriminatory have been, or are being, equalized, so that in general U.S. equipment is competitive. For the most part, says Branigar, the products of the mission members require only minor changes to meet market requirements in these countries.

Several members felt that persuading African buyers to visit plants in the United States would be helpful in initiating business. Some invitations were extended and five or six visits are expected.

All three countries have laws controlling and restricting the export of logs, Braingar pointed out. Requiring that at least some of the value of the finished wood product be added by local people, he notes, is a logical step that coincides with moves to get more nationals into management positions.

On the negative side, Branigar cites as perhaps the greatest single problem an almost complete lack of management skills and business experience. In Cameroon, in an effort to bring more Cameroonians into business, the government has recently granted cutting rights of 10,000 hectares and under to Cameroonians only. "One of our most experienced members, who has been in these areas before, is providing help to one such individual, who has a small—and old—sawmill in operation," Branigar said, observing that this is a good example of a practical approach to the "experience gap."

Branigar also called attention to the countries' considerable cash and credit shortages for major purchases, especially for the long term, and declared the keys to sales are financing, service, and spare parts availability.

Mission participants, by firm, were as follows: Capital Machines International Corp., Indianapolis, L. Jack Koss; Eaton Corp., Willow Grove, Pa., Michael N. Sanderson; Engineering Equipment Co., Chicago, Walter Pfeifer; Enterprises International, Hoquiam, Wash., George E. Lamb; Ferrex International, New York, Andrew N. Ferretti; Forest-All Corp., Concord, N.H., Henry M. Shepard; Kimwood International, Cottage Grove, Ore., Warren H. Zuercher; McCulloch of Europe N.V., Mechelen, Belgium, Frank C. Birgel; Royal Industries, Tualatin, Ore., Gregory R. Hatton. Bertil Renborg of the Commerce Department's Office of International Marketing served as the mission's deputy director.

For additional information on trading opportunities in the countries visited by the mission, see the on-scene report in the March 31 issue of *Commerce Today*, pages 5-7, by Frank Ocwieja, Commerce's Country Marketing Manager for Central Africa. Owieja recently interviewed more than 50 industrialists, importers, and government officials in Cameroon, Gabon, and Ivory Coast.

IN ABIDJAN—*Mission Director Harvey W. Branigar, Jr. (left) meets with Ivory Coast's Minister of Waters and Forests, Naulo Bamba.*

New Market Share Reports Available

A new group of Commerce Department's Market Share Reports, containing updated data on world trade in 880 manufactured products for the period 1969-73, is now available, once again in two convenient formats to permit U.S. exporters to evaluate performance vis-a-vis foreign competitors.

The Commodity Series reports, useful for examining the world market for a particular product, show export data for the five years for individual products shipped from the United States and 13 major exporting countries to 92 destinations. The competitor countries are Austria, Belgium-Luxembourg, Canada, Denmark, France, Federal Republic of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Japan.

The Country Series reports present the value of imports into each of 82 countries of the 880 manufactured products over the 1969-73 period. Products are classified by the United Nations Standard International Trade Classification, Revised (SITC).

The commodity reports present data on the major types of manufactures, including chemicals, machinery, transport equipment, metals, textiles, and consumer goods. They cover a broad range from harvesting machinery, trucks, and pipe fittings to cellulose and equipment for indoor games. Dollar values are shown for exports from the United States, eight major suppliers, and the world total. The U.S. percentage share of the total market has been calculated.

The 82 country reports include 35 based on foreign import data from each of the developed countries of the world—the Western European nations, Canada, Japan, Australia, and New Zealand. Identical reports are also available for many developing nations, including Mexico, Brazil, Israel, Lebanon, Egypt, Pakistan, Singapore, Hong Kong, Thailand, and Tunisia.

The other 47 country reports present similar information based on the export statistics of the United States and 13 other major industrial nations, since computer-usable import data from these countries are unavailable. Included in this group are reports for six countries not previously published—Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Romania, and the United Arab Emirates—as well as many developing countries in Latin America, Asia, and Africa.

The user of the Market Share Report for Australia, to cite one example, would find some dynamic shifts in the market for fork-lift trucks. Australian imports of these trucks from all sources grew by 51 percent to $17.2 million from 1969 to 1973. Despite only a slight decline in the value of imports from the United States, our share was almost halved to 25.1 percent in the five-year period. This change was partly the result of a huge expansion in Australian imports from Japan, which increased the Japanese share of the import market from 9.7 percent to 28.1 percent.

The Market Share Reports Catalog, COM-75-10212, listing all the commodity and country reports and order numbers, may be obtained free from the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161, telephone 703-321-8543. Commodity reports cost $2.75 and country reports $3.75 per copy.

Official Trade Briefs

This article is another in a series of reports that describes actions affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Staff's Office of International Trade Policy.

THE PRESIDENT

Message to Congress: In his State of the World address to Congress April 10, the President recommended the amending of provisions of the Trade Act of 1974 that forbid extension of U.S. export credits and other trade benefits to the Soviet Union unless Soviet restrictions on emigration are eased. As a result of this provision, said the President, the Soviet Union has refused to put into effect the 1972 U.S.-Soviet Union Trade Agreement and has turned instead to European and Japanese sources for goods which it wants. The President stated that U.S. opposition to restrictive Soviet emigration policy is well known, but suggested that withholding of credits is not a productive method of dealing with the problem.

The President also urged Congress to reconsider a provision of the Trade Act which excludes all OPEC members from the U.S. Generalized System of Trade Preferences (GSP) scheme. This provision has excluded from the GSP countries which are members of OPEC but which did not participate in the oil boycott, such as Venezuela, Ecuador, Nigeria, and Indonesia. The President endorsed amendments already introduced in Congress which would permit waiving restrictions incompatible with U.S. national interest.

THE CONGRESS

Committee Hearings—House: The Subcommittee on International Organizations of the Committee on International Relations on March 18 approved for full Committee action H.R. 1287 amended, to amend the United Nations Participation Act of 1945 to halt importation of Rhodesian chrome.

The Subcommittee on International Trade and Commerce of the Committee on International Relations in March continued hearings on H.R. 4967, which would prohibit domestic exporters from taking any action, including the furnishing of information or signing of agreements, which has the effect of furthering or supporting restrictive trade practices or boycotts imposed by any foreign country against another country friendly to the United States.

Bills Passed: The Senate passed H.R. 4296, to establish emergency programs for various agricultural commodities, after adopting an amendment providing for a 90-day suspension of imports of fresh, chilled, or frozen cattle meat and fresh, chilled, or frozen meat of goats and sheep (except lambs). However, the amendment was rejected by the Senate-House conference committee on the bill.

The House of Representatives agreed to House Resolution 163, to amend the Rules of the House to change the name of the Committee on Foreign Affairs to the Committee on International Relations.

New Legislation: Since the opening of the 94th Congress, 258 trade and related bills have been introduced. Proposed legislation not previously reported in this column includes: S. 1266, to amend the Comprehensive Drug Abuse Prevention and Control Act of 1970 and other laws to discharge obligations under the Convention of Psychotropic Substances relating to regulatory controls on the manufacture, distribution, importation, and exportation of psychotropic substances; S. 1303, to regulate the foreign commerce of the United States by providing means to assure full disclosure of significant foreign investment in the United States; S. 1305, to amend the Agricultural Trade Development and Assistance Act of 1954 to prohibit disposition of food to foreign countries under such act in any fiscal year unless the Secretary of Agriculture determines and certifies that all domestic feeding programs will be adequately provided with appropriate foods in such fiscal year;

S. 1316, to amend the Federal Food, Drug, and Cosmetic Act to prohibit export of any drug from the United States unless an application for approval of such drug has been obtained under section 505 of such act; S. 1354, to assure foreign countries that reserve stocks of agricultural commodities stored in the United States under certain conditions shall not be subject to export controls; H.R. 4884, to amend the Educational, Scientific, and Cultural Materials Importation Act of 1966 with regard to any prosthetic or orthotic device; H.R. 4994, to provide for the free entry of a pipe organ for the Lutheran Church, Honolulu, Hawaii; H.R. 5009, to suspend for a 3-year period the duty on typewriter parts; H.R. 5436, to provide for the temporary suspension of duty on importation of silver nitrate;

H.R. 5491, to establish a National Foreign Investment Control Commission to prohibit or restrict foreign persons from acquiring securities of certain domestic issuers of securities deemed vital to the economic security and national defense of the United States; H.R. 5509, to amend the Tariff Schedules of the United States to provide duty free treatment to watches manufactured in any insular possession of the United States if foreign materials do not exceed 70 percent of the total value of such watches; H.R. 5510, to authorize the payment by the U.S. Government to the U.S. Virgin Islands of oil import license fees collected for imports into Puerto Rico, and for imports into the Customs Territory of the U.S., from the U.S. Virgin Islands;

H.R. 5544, to require that all timber harvested from lands owned by the United States west of the 100th meridian be processed in the United States, and that only certain products from the processing of timber harvested from certain lands owned by the United States be exported from the United States; H.R. 5585, to amend the Trade Act of 1974 to provide for application of the generalized system of preferences to Western Hemisphere countries; H.R. 5629, to provide for the duty free entry of binder twine and baler twine of manmade fibers; H.R. 5670, to provide for review of petroleum import supply contracts and to provide for authority for the Government to enter into foreign supply contracts for petroleum;

H.R. 5676, to prohibit importation of pate de foie gras made from the livers of ducks or geese which have been forcefed by mechanical means; H.R. 5762, to impose quantitative limitations on importation of shrimp into the United States during calendar years 1975 and 1976, and to impose a duty on imported shrimp; H.R. 5766, to continue for a temporary period the existing suspension of duty on certain istle; H.R. 5883, to create a Joint Congressional Committee on Foreign Investment Control in the United States; H.R. 5897, to amend the Trade Act of 1974 in order to authorize the President to designate any of certain countries as eligible for the tariff preferences extended to developing countries under Title V of such act if the President determines that such designation is in the national economic interest.

INT'L TRADE COMMISSION

Adjustment Assistance—Workers: The Commission reported to the President that the following groups of workers do not meet the requirements of the Trade Expansion Act of 1962 (TEA) and are ineligible to apply for adjustment assistance: former workers of Williamston Pants Co., Inc., Williamston, N.C., and Westminster Manufacturing Co., Inc., Westminster, S.C. **(men's and boys' trousers);** former workers of Northland Shoe Corp., Fryeburg, Me., and Eastland Shoe Corp., Freeport, Me., wholly owned subsidiaries of Standard Prudential Corp., New York **(women's footwear).**

The Commission reported to the President that it was equally divided on whether workers of the following firms are eligible to apply for adjustment assistance: workers of Shaer Shoe Corp., Inc.,

Manchester, N.H. **(footwear for women)**; and workers of Sandler-Ette Footwear Manufacturing Corp., Webster, Mass., a wholly-owned subsidiary of Kayser-Roth Corp., New York **(footwear for women, misses, and children)**. Subsequently, the President accepted the views of the Commissioners who found that the workers have been injured, and declared them eligible to apply for adjustment assistance.

Adjustment Assistance—Firms: The Commission reported to the President that Weiss-Lawrence, Inc., Dover, N.H. **(footwear for women, misses, and children)** meets the requirements of the TEA to apply to the Department of Commerce for adjustment assistance.

Section 337 Cases (Unfair Import Competition): The Commission announced that it had made a finding of a violation of Section 337 of the Tariff Act of 1930 involving **certain electronic pianos,** (337-31) but recommended to the President that he not issue an exclusion order to forbid entry into the United States of such pianos.

The Commission denied a request for a rehearing in investigation No. 337-37, **certain golf gloves.**

Dumping Cases: Having received advice from the Treasury Department that imports of the following merchandise are being, or are likely to be, sold at less than fair value, the Commission instituted the following investigations to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States: **welt work shoes** from Romania, **lock-in amplifiers and parts thereof** from the United Kingdom, and **portable electric typewriters** from Japan. Having received advice from the Treasury Department that there is substantial doubt whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of importation of **butadiene acrylonitrile rubber** from Japan, the Commission instituted an investigation to determine whether there is reasonable indication that a domestic industry is being injured by importation of such merchandise into the United States.

The Trade Act of 1974 provides that if the Treasury Department, upon receipt of a dumping complaint, determines that there is substantial doubt as to whether a domestic industry is being injured by "dumped" imports, it may refer the complaint to the Commission. If the Commission determines within 30 days that there is no reasonable indication of injury, the investigation is terminated.

TREASURY DEPARTMENT

Dumping Cases: The Department has announced the withholding of appraisement on **electric golf cars** from Poland.

A dumping finding on **potassium chloride** from West Germany has been revoked.

An antidumping investigation has been initiated on wet motor type **water circulating pumps,** suitable for use in residential and commercial hydronic heating systems, from Sweden.

The Department also announced the modification of a previous dumping finding on **tuners** from Japan to exclude from the order tuners produced by Matsushita Electric Industrial Co., Ltd., Matsushita Electric Trading Co., Ltd., and Victor Co. of Japan.

COMMERCE AND LABOR

Adjustment Assistance—Workers: The Labor Dept. certified the following groups of workers as eligible to apply for trade adjustment assistance: about 1100 employees of General Electric Company plants in Syracuse and Auburn, N.Y. **(electronic components);** about 100 employees of Joseph Weiss & Sons, Inc., Brooklyn, N.Y. **(manufactured granite);** about 350 employees of the Manchester, N.H., plant of the Shaer Shoe Corp. **women's footwear);** and about 300 employees of Sandler-Ette Footwear Mfg. Corp., Webster, Mass. **(women's footwear).**

Adjustment Assistance: New eligibility criteria and investigatory responsibilities for workers, firms, and communities adversely affected by increased imports went into effect on April 3. The new program, authorized under provisions of the Trade Act of 1974, replaces the one established by the Trade Expansion Act of 1962. The new approach is expected to provide benefits for increased numbers of workers and firms, and additional aid to restore the economic viability of communities adversely affected by imports. Unlike present procedures, workers and firms will not be required to petition the International Trade Commission for certification of eligibility to apply for adjustment assistance. After April 3, workers will apply directly to the Secretary of Labor, while firms and communities will apply to the Secretary of Commerce for eligibility certification and assistance.

INTERNATIONAL

Canada—Dumping Case: The Anti-Dumping Tribunal has found that the dumping into Canada of **crepe paper masking tape and filament reinforced strapping tape** originating in the United States has not caused, is not causing, and is not likely to cause, material injury to the production in Canada of like goods.

U.S.-USSR Joint Commission Meets In Moscow; Sees Renewed Momentum

The Joint U.S.-USSR Commercial Commission, meeting in Moscow April 10-11 under the chairmanship of Soviet Minister of Foreign Trade N. S. Patolichev, completed at its fifth session a wide-ranging review of trade issues and renewed the determination of both governments to remove the barriers which prevent full development of trade between them.

The Commercial Commission was established in May 1972 as a mechanism for monitoring the spectrum of economic relations between the two countries. Its sixth session is scheduled to be held in Washington in 1976.

The chairman and vice-chairman of the U.S. Section of the Commission, Treasury Secretary William E. Simon and Acting Commerce Secretary John K. Tabor, were received by Leonid Brezhnev, General Secretary of the Communist Party of the USSR.

Both sides expressed regret that it had not yet been possible to bring into force the 1972 Trade Agreement. The U.S. Section affirmed the determination of the Administration to work with the Congress in obtaining enactment of legislation which will hasten the normalization of trade and financial relationship between the United States and the USSR.

The meeting were marked by a belief that economic bonds between the two were gathering strength despite occasional strains during the past year. This session of the Commission helped to generate a new sense of forward momentum in trade relations between the United States and the Soviet Union, it was felt.

Indian Machine Tool Show Open To U.S. Companies

IMTEX—75, an exhibition sponsored by the Indian Tool Manufacturers' Association, will be held in Bombay during November. The sponsors expect that over 100 manufacturers, including many foreign concerns, will participate in the 10-day exhibition.

Products eligible for display include power and manually operated metal working machines, attachments and accessories, testing and measuring instruments, welding equipment, various woodworking machines, foundry equipment and supplies, electric motors, precision bearings and other items related to the machine tool industry.

Interested U.S. firms should write: The Secretary, Indian Machine Tool Manufacturers' Association, Great Western Bldg., 130 Shahid Bhagat Sing Marg, Bombay 400001, India.

Multilateral Trade Negotiations

This article is another in a series of reports on preparations for and notable developments in the multilateral trade negotiations, as prepared by the Department's Office of International Trade Policy.

GENEVA: The **MTN Tariff Group,** which seeks agreement on a general tariff negotiating formula, found at its first meeting March 18-21 that the delegations were generally not in a position to table specific proposals. Another meeting will take place during the week of May 12, and it is expected that some specific proposals will be advanced for further study.

Discussion at the first meeting tended toward consideration of possible tariff reduction approaches. Of interest were harmonization approaches. One, for example, would aim at leveling tariffs off around a specified percentage. Another would be based on the height of the tariff, so that high duties would be reduced more than low rates. Some delegations suggested combining a harmonization approach with other techniques.

A different approach discussed was a linear type in which each rate line of a country's tariff is reduced by a specified percentage. This was the general approach used in the Kennedy Round. Suggestions were also made for possible mixing of a linear approach with other techniques.

Some delegations expressed the desire for a floor below which duties would not be reduced, unless countries wished to lower duties under the floor, in which case they would receive credit toward achieving reciprocity.

Developing country spokesmen frequently expressed concern that the general duty reductions should not erode the margin of preference which these countries now enjoy under the generalized preference schemes (GSP) applied by the developed countries.

It is impossible at this stage to predict the progress which will be made in coming months on a tariff negotiating plan, but it is certain that such a plan will have to be developed in coordination with the other Groups, including Sectors, Nontariff Barriers, and Agriculture. In the meantime, the U.S. is seeking the advice of industry, labor and agriculture on the wide variety of issues that must be considered in the development of any negotiating formula. The application of any formula to individual products insofar as the U.S. is concerned must await advice from the U.S. International Trade Commission, the Industry Sector Advisory Committees and other private sector sources.

The **MTN Tropical Products Group** meeting has been followed by a circular questionnaire from the GATT Secretariat to the developing countries seeking their requests on specific tariff and nontariff barrier concessions by May 16.

The **MTN Sectors Group,** at an April 7-9 meeting, asked for a GATT study on ferrous and non-ferrous ores and metals, including products made from them through several degrees of processing, up to simple consumer products such as knives and nails. The study would cover trade and production data, tariff and nontariff information. The U.S. had originally suggested to the Group that studies be undertaken for iron and steel, chemicals, aluminum, electronics and electrical machinery, five areas suggested by the Senate Finance Committee in its Trade Act report. The U.S. was reluctant to suggest other study areas, pending completion of its consultations with private industry, and was also emphasizing that it was not yet proposing a sectoral approach in the five suggested areas, but rather examining the feasibility of this approach.

Canada, a number of developing countries and, to a lesser extent Australia and New Zealand, appear to be leaning toward the sector approach for some products. These nations hope to increase domestic production of manufactured goods incorporating the raw materials which they are presently exporting, minerals and timber in the case of Canada. Other countries, however, have not yet decided on a position on this issue.

The U.S. believes that the Group made useful progress in agreeing to the compromise proposal to study initially metallic ores and metals, which is to be completed for the next meeting, scheduled for the week of June 30.

The **MTN Agricultural Group,** which met March 25-28 and briefly April 15-16, recessed without reaching agreement and will meet again May 7. Differences remain with respect to the product sectors and the problem areas on which to seek multilateral solutions, as well as relationships with the other MTN Groups, particularly those on tariffs and nontariff barriers. The latter groups have been directed to draw up plans that have the widest possible basis.

Despite initial differences in approach, there is a growing consensus in this Group that one way for it to carry out its mandate is to establish commodity subgroups for the major agricultural products in world trade. However, if such subgroups are set up this would require procedures to insure a link with the other international bodies dealing with commodities.

The **MTN Safeguard Group** met April 10-11 and agreed on a modified version of the U.S. suggestion for a two-phase program toward an improved multilateral safeguard system. The first phase is to examine the adequacy of the present system, including GATT Article XIX. A questionnaire is now being circulated among the GATT member nations on remedial import restrictions and responses will be studied at the next meeting in June. After detailed discussions of current safeguards are completed, possibly by fall, second-phase discussions of elements in an improved system will begin.

The **MTN Nontariff Barriers Group** will continue its negotiations this month at a series of four meetings of subgroups that were scheduled to begin on April 22. It is hoped that the first meeting, on quantitative restrictions and import licensing procedures, will establish a firm basis for negotiations on this issue, leading to significant reductions and harmonization of licensing requirements. Negotiating sessions on product standards, customs matters and subsidies and countervailing duties will follow at two week intervals through June 13. The parent Nontariff Barriers Group will then review progress.

WASHINGTON: For the **Office of Special Representative for Trade Negotiations,** President Ford has nominated two Deputy Special Trade Representatives, with the intent to fill new positions created by the Trade Act of 1974. Nominees are William N. Walker, presently director of the Presidential Personnel Office, and Clayton Yeutter, currently Assistant Secretary of Agriculture for International Affairs and Commodity Programs. Walker will be based in Geneva, Yeutter in Washington.

The **U.S. International Trade Commission,** holding public hearings across the country on the impact of possible tariff reductions, is also preparing its report to the President on the Public List—those articles to be considered for modification or continuance of duties—which must be completed by July 14. Its report to the President on the list of articles to be considered for GSP treatment must be completed by Sept. 24.

The **Industry Consultations Program** will move into a second round of meetings May 1. The 500 members of the 26 Industry Sector Advisory Committees (ISACs) will gather over a three-week period to review draft reports on U.S. negotiating objectives. The draft reports have been prepared by the staffs of the Commerce Department and the Special Representative for Trade Negotiations, drawing on individual member's submissions. In some cases, final report approval is expected at the May sessions, but in other cases, a third meeting, perhaps in July, may have to be called. The approved ISAC reports will go to the Industry Policy Advisory Committee for review as to consistency with overall U.S. negotiating objectives, and then will be made available to the U.S. negotiators and to policy formulators.

LABEL IT A SELLER—*At U.S. phamaceutical and cosmetics equipment exhibition in Mexico City, Potdevin's labeling equipment found a ready market.*

U.S. Drugs, Cosmetics Equipment Show In Mexico Spurs Sales

Business activity during a recent U.S. Trade Center show in Mexico City should weaken the belief that, as most pharmaceutical and cosmetic companies there are foreign-owned, such industries are captive markets for equipment suppliers from the parent company's country. Representatives from all the major firms in Mexico discussed possible purchases with the American exhibitors.

Demand by the Mexican pharmaceutical and cosmetic industries continues strong for sophisticated processing, packaging and quality control equipment. Purchase of imported machinery and instrumentation by these highly related industries is estimated at $14 million. The United States holds about 70 percent of this market. Pharmaceutical companies number some 770 in Mexico; 56 control about 75 percent of the drug market. The cosmetic industry is made up of about 200 major and medium-size firms.

Highest demand at the exhibition was for the following: molecule concentrators, distillers, spectrophotometers, chromatographs, balances, mixers, liquid packaging equipment, milling equipment, homogenizers, specialized pumps, labeling equipment, disposable filters, and tableting machines.

One of the new-to-market exhibitors reported that the show was "top-notch." As reported in the April 14 issue of *Commerce Today*, page 24, the 29 companies totaled almost $256,000 in floor sales and estimate $4.5 million over the next 12 months.

U.S. Exhibitors Welcome At Cairo Building Fair

Officials of the Cairo International Fair are inviting U.S. businessmen to participate in the Cairo International Exhibition for Building Materials and Equipment, INTERBEQUIP, at Guezira, Egypt, Oct. 20-30. The event will provide opportunities for U.S. producers and suppliers to display their latest products to builders and contractors from all over the Arab world.

Interested firms should contact Nasser Madkour, Director General, Cairo International Fair, Guezira, Cairo, Arab Republic of Egypt; cable address, NEFERTITI-CAIRO.

Audio-Visual Products Draw Buyers At Paris Trade Center Display

French legislation on employee training prompted keen interest in audio-visual equipment displayed recently at the Paris U.S. Trade Center. Some 500 trade visitors and high-level professionals viewed the exhibition by new-to-market firms.

U.S. audio-visual products are clearly acknowledged to have a technological lead in France. Among the popular items are closed circuit TV systems, video tapes and recording systems, cassette equipment, cartridge film systems, management training film, and library aids.

Earlier market research had indicated the need for substantial increases in the use of audio-visual products because of French legislation requiring private companies with more than ten employees to invest in employee training an amount equal to 0.8 percent of salary. This percentage is to increase to 2 percent by 1976.

As reported in the March issue of *Commerce Today*, page 23, the five participating companies reported immediate and anticipated 12-month sales at more than $400,000.

STANDING ROOM ONLY—*Recent U.S. audio-visual equipment show in Paris—by five new-to-market U.S. firms—drew an unusual number of trade and professional visitors.*

Worldwide Business Outlook

Nigeria's Stability, Dynamic Economy Outweigh Operational Difficulties

For a growing number of American firms, Nigeria's twin attractions of political stability and a dynamic economy fueled by oil revenues totaling $9 billion in 1974, are convincing enough to offset what can be substantial operational difficulties. Nigeria has a gross national product of $22.6 billion, which just about equals that of the rest of black Africa put together, and the country's population of more than 79 million represents the continent's largest consumer market, according to John J. Sullivan, Commercial Attache at the U.S. Embassy in Lagos.

Increased American interest in both trade and investment is evidenced by the upsurge of U.S. businessmen visiting Nigeria (despite problems of obtaining visas and accommodations) seeking representation and exploring investment opportunities with prospective Nigerian partners.

While in the past Nigeria attracted mainly oil investment from the United States, the country is now seeing an influx of American banks, engineering and contracting firms, as well as manufacturing firms. Similar interest in the Nigerian market, however, is shown by traditional and well established competitors, the British, Europeans, and more recently, the Japanese.

From the moment you step off the aircraft at Lagos Airport, you begin to comprehend the current Nigerian feeling of buoyancy and optimism. Telephones may not work, the traffic may not move, poverty may lie juxtaposed with opulence, but Nigeria reflects the dynamism of one of the world's fastest growing markets.

Nigeria has a mixed but highly competitive economic system which values the entrepreneur and profit incentives. While this system is probably the most efficient system the country could adopt, it has not yet solved the problems of uneven distribution of national wealth, inflation, and high unemployment.

Nigeria's new oil wealth is a recent development. The oil fields saw their real expansion begin only after the civil war ended in 1970. Then the worldwide increase in the price of crude oil in combination with Nigeria's nationalization of majority control of the foreign oil companies provided oil revenues sufficient to radically transform the economy through development.

Some $48 billion has been designated for national development between now and 1980. The largest outlay, nearly $10 billion, has been allocated to the industrial sector. During the plan period, the government anticipates construction of two liquefied natural gas projects, together costing over $3.4 million. In addition to construction of two new oil refineries at Warri and Kaduna, the existing Port Harcourt refinery is to be expanded, while one or more export-oriented refineries with capacity of 200,000 barrels per day each will be built. These projects together will cost almost $200 million. In addition, three new cement plants and expansion of three existing ones will be undertaken at a cost in excess of $350 million.

Infrastructure improvements

The second largest increment of plan outlays, $6.7 billion, will go to the transport sector. More than $5.5 billion of this sum will be spent upgrading the nation's roads. An additional $650 million has been set aside for improvement of the rail system, while a slightly lower figure is designated for improvement of air fields.

Spending of more than $5 billion is planned for regional development, which includes sewerage, water supply, and town and country planning. More than $3 billion is for housing alone. It is estimated that the primary school population is 4.4 million; with universal primary education scheduled to begin in 1976, needs in this field are vast, and $3.2 billion has been budgeted.

In agriculture, nearly $2.3 billion is to be spent on distribution of 960,000 tons of fertilizer, irrigation of 1.4 million acres of land and planting of 3.6 million acres of cereals and 1.5 million acres of root crops.

Other large expenditures include health ($1 billion), water transport ($627 million) and power ($264 million). Implementation is expected soon on a range of major projects, some carryovers from the last five-year plan, including petrochemicals, nitrogenous fertilizer and truck assembly. Other industrial projects already under way include automobile assembly, salt, sugar, glass, pulp and paper, and superphosphates.

Granted that limits on technical and executive capacity may keep Nigeria's plans from being fully realized, it is nevertheless clear that vast amounts will be spent and that unprecedented business opportunities will result.

Since the beginning of the year, work stoppages have disrupted essential services in several Nigerian cities as government workers have expressed dissatisfaction with size of pay increases and private employees have demanded similar raises. The unrest follows the government's approval of pay increases of up to 133 percent, retroactive to last April, for 750,000 government workers. The pay awards are seen by Sullivan as the first direct sharing of the country's new oil wealth.

Although this resulting industrial unrest has inconvenienced the urban dweller, it has not materially disrupted the country's bustling economy. The awards, however, especially the lump-sum retroactive payments, have resulted in sharp increases in prices of consumer goods, thereby accelerating Nigeria's already serious inflation.

Attracted by the opportunities, the American presence in Lagos has grown considerably within the past year. First National Bank of Chicago and Bank of America are already in operation there, and both Chase Manhattan and First National City will open soon. Morgan Guaranty, with local and British partnership, expects to begin merchant banking shortly, and Bankers Trust now has a representative office in Lagos.

Nigerian officials welcome investments which will benefit the local economy and at the same time provide a reasonable return to the overseas investor. Some Nigerian equity participation in new ventures is necessary in most cases. Beyond this, the government particularly wants industries which utilize local raw materials, but above all wants training programs which will allow Nigerians to quickly move into upper level technical and managerial positions.

Evidence of the government's open-door policy toward new investment and particularly new U.S. investment is the investment guarantee agreement recently signed between Nigeria and the United States (see photo next page).

The United States has become Nigeria's most important customer, taking about 27 percent of Nigerian exports of crude oil, but U.S. exports to Nigeria have remained at 10-11 percent of the market. We had a deficit of $3 billion in trade with Nigeria in 1974. Hopes for erasing this huge deficit are unrealistic, but with the abundant sales and investment oppor-

Reports Are Available

Nigerian prospects in three sectors were reviewed by Marlene McKinley of Commerce's Africa Division in an article in *Commerce Today*, Feb. 17, page 30. Complete reports on Miss McKinley's three studies (Building and Construction, 75-02023; Power Generation and Transmission, 75-02024; and Health Care, 75-02046) are available for $3.25 each from NTIS, U.S. Department of Commerce, P.O. Box 1553, Springfield, Va. 22151.

OPIC IN NIGERIA—*U.S. Ambassador John E. Reinhardt (left) exchanges notes with Okoi Arikpo, Nigerian Commissioner of External Affairs, in Lagos Feb. 10, reactivating the Overseas Private Investment Corporation (OPIC) guarantee agreement. The Nigeria agreement is one of some 85 such programs providing qualified U.S. investors in developing countries with political risk insurance and finance services. U.S. companies planning to invest in Nigeria are invited to contact Bonny M. Henderson, Investment Officer Supervisor for Africa, OPIC, 1129 20th St., NW., Washington, D.C. 20527, phone 202-632-9154.*

tunities in Nigeria there is no reason why U.S. businessmen cannot greatly increase exports there.

In addition to the obvious needs for oil field and process plant equipment, best prospects for U.S. sales appear to be in the areas identified by Sullivan as priority product categories, i.e., energy and communications equipment; agricultural machinery, services and equipment; business equipment and systems; health care equipment; instrumentation and services; food processing and packaging equipment.

With effort and perseverance qualified Nigerian agents can be located. New lines to the market must generally be assigned to relatively young Nigerian companies which are unable to purchase goods on a letter of credit basis or to allocate funds to train and build maintenance service capabilities. To be successful in the market, U.S. firms thus must be prepared to invest in their distributor both in American staff and training, and in furnishing revolving credits or consignment merchandise until profitable operations can be established. Nigerian sales representatives tend to need supplier support on demonstration units which are essential in a market where customers react quickly to equipment that can be seen and touched.

If an American exporter does not elect to have a Nigerian representative but prefers to sell directly to buyers there, he should take special precautions to restrict dealings to firms favorably reported on by his bankers or credit reporting firms, or in World Trader's Data Reports available from the U.S. Department of Commerce. A number of American firms have had a problem with solicitations from unscrupulous petty traders who are not representative of the Nigerian business community. The inquiries will usually take the form of a request for samples or a small trial shipment with the promise of substantial follow-up orders if the product proves to be marketable. The merchandise, of course, is never paid for. To support such efforts, inquiries frequently contain bogus bank drafts ostensibly drawn through known or fictitious banks, or the buyer will agree to payment on delivery. (See *Commerce Today*, April 14, page 31, for a list of Nigerian banks licensed to handle foreign exchange.)

The need for caution in initial dealings with unknown firms does not preclude extending credit in trade with Nigeria. Within the Nigerian business community there are many companies with which mutually beneficial credit arrangements can be reached, once continuing commercial relationships have been developed.

The sales return is likely to be in direct proportion to time and energy expended. U.S. firms that make a serious effort to discover opportunities in Nigeria are finding them.

The time and effort necessary to do business in Nigeria is often greater than elsewhere, but so are the rewards.

Businessmen Crowd Nigeria

There is a shortage of hotel rooms in Lagos and other cities in Nigeria. Reservations must be made several months in advance and reconfirmed before arrival. Visitors are advised not to arrive in Lagos without confirmed hotel reservations.

Czechoslovakia Faces Slower Growth; Trade Act Problems Delay U.S. Sales

Czechoslovakia, in the final year of its Fifth Five-Year Plan (1971-75), is faced with several adverse economic factors which may force a slowing in its average, but respectable, growth rate of recent years. The U.S. Embassy in Prague adds that the expected improvement in U.S. commercial relations with Czechoslovakia may be delayed while problems connected with the Trade Act of 1974 are sorted out.

In 1974 national income grew by 5.5 percent over the previous year, and although problems in meeting plan norms increased in some sectors, the government was generally satisfied with the economy's performance during the year. Faced with rising costs of energy and greatly increased prices for raw materials, including crude oil, from the Soviet Union with effect from January of this year (rather than in 1976 as formerly expected), the economy will be in for a year of adjustment which may force a sharp reduction in the planned growth rate for 1975 of 5.6 percent.

Czechoslovakia annually derives about 40 percent of its total national product from foreign trade. In recent years the Czechs have adhered closely to the implied CEMA rule that bilateral trade with non-socialist countries should be held to one-third of each member country's total trade by value. Foreign trade with all countries increased 23.2 percent in 1974 over 1973: 14.5 percent higher with socialist countries, 34.7 percent higher with industrialized and developing non-socialist countries—25 percent stemming from higher prices and only 10 percent resulting from increased volume. Exports increased by over 20 percent (nearly 34 percent to non-socialist industrialized and developing countries); and imports grew by almost 26 percent (35 percent from non-socialist countries). The result was that Czechoslovakia ended the year in overall deficit both with CEMA trade partners and with the non-socialist world. The Minister of Foreign Trade stated publicly in March that "logical" predominance of exports over imports will prevail in the future.

Large hard-currency deficit

During 1974 Czechoslovakia suffered one of its largest hard-currency deficits in recent years (over $100 million at the official parity of 5.83 Kcs. to U.S. $1) and this may have an adverse effect on imports in 1975. Certain needs for modern technology, equipment and raw materials can only be met in the West; therefore, a significant volume of trade should continue if Czechoslovak terms of trade with non-socialist countries do not deteriorate further.

As for trade with other CEMA partners, the Soviet decision to increase prices on selected raw materials and products from the beginning of January 1975 was a blow to Czechoslovakia's plans for stable growth, particularly since payment to the Soviets must be made partially in hard currency for purchases above stipulated quota limits. Because of Soviet reliance on CEMA-wide participation in several raw

material development projects in the USSR, Czechoslovak trade ties within CEMA are likely to be strengthened in the future.

Czechoslovak/U.S. trade in 1974 fell for the first time since 1968, according to Commerce Department data, declining to a total volume of $94.1 million, 12.3 percent less than in 1973. The trade balance continued to favor the United States, although by only $3 million, as compared with a surplus of nearly $37 million a year earlier. Major exports from the United States were, in order of importance: soybean oil-cake and meal; cattle hides; tobacco, cured and bulk; sunflower seeds; aircraft parts and computers. Major imports from Czechoslovakia were: steel wire rods; textile spinning machinery; men's footwear; glassware and jewelry; motorcycles and parts; and machine tools.

The question of how trade with Western countries and above-quota shipments of Soviet raw materials are to be paid for is an important one. Widely considered one of the most conservative countries in Eastern Europe insofar as incurring debt in the West is concerned (by one estimate Czechoslovakia's hard currency indebtedness was equal to only 10 months' exports as compared with 16 months' exports for all of Eastern Europe), Czechoslovakia has begun lately to take an active look at credit facilities in the West. Although there is little evidence that the government has begun to accelerate its generally low-level borrowings on the Eurocurrency market, there are strong indications that Czechoslovakia might be forced to consider borrowing more heavily, perhaps through the CEMA bank in Moscow which recently concluded a $400-$500 million loan in the West. Even though demand for Czechoslovak goods is falling in Western countries, because of the recession in business activity there as well as poor product quality and design, requirements for hard currency imports have not diminished; thus the options to larger borrowings of hard currency would appear limited if economic growth is to be maintained.

Enactment of the Trade Act of 1974 has had an important impact on the outlook for improved trade and commercial relations between the United States and Czechoslovakia. Apart from the Jackson-Vanik Amendment (adopted as Section 402 of the Act) linking normalization of trade relations with the emigration policies of most countries of Eastern Europe, a separate provision (Section 408) effectively denies to Czechoslovakia specifically any benefits flowing from the Act—most importantly, Most - Favored - Nation (MFN) status—until the gold and property claims agreement initialed in July between the United States and Czechoslovakia has been renegotiated on terms acceptable to the U.S. Congress. The fact that the Soviet Union has abrogated the 1972 U.S./USSR Trade Agreement, ostensibly because of the emigration clause, means that the question of Section 402 will probably be dealt with in the larger context of U.S.-Soviet relations. But resolution of the difficulties posed by Section 408 will require renewed negotiations between the United States and Czechoslovakia on a long outstanding issue that had been thought settled last July.

In the meantime, the Czechoslovaks have reacted to the provisions of the Trade Act with restraint and with none of the harsh tones which often marked reversals in relations in the past. On a more practical level, the Czechoslovaks indicated that they do not intend to take any measures which would exclude U.S. firms from consideration in their current purchasing plans. They concede, however, that the absence of MFN status, which would have enabled Czechoslovakia to increase its dollar earnings in the United States and thus support expansion of bilateral trade, will continue to act as a curb on further growth in our trade relations.

U.S. industry has an excellent reputation in Czechoslovakia and is considered second to none in development of advanced technology and know-how. A highly industrialized country saddled with aging plant and equipment, Czechoslovakia is a natural market for U.S. producers of machine tools, process control, EDP, and other production-related equipment.

During the 1930s the United States was for a brief period Czechoslovakia's third largest trading partner. Given a more normal trading atmosphere, there is no reason U.S. businessmen could not build on their past record to re-establish the United States as a major Western supplier there.

At present, the bulk of U.S. exports to Czechoslovakia consists of agricultural products, with industrialized goods accounting for less than a third of total shipments. As the value of the U.S. dollar declines relative to other currencies, this would seem an opportune time for U.S. businessmen to step up activity in Czechoslovakia.

U.S. firms looking to the future should recognize that problems related to the Trade Act will sooner or later be resolved in a manner which will allow Czechoslovakia easier access to the U.S. market. When this happens the Czechoslovaks will logically seek to expand business first with those firms which have established a reputation for doing business over the long run. As a matter of fact, several U.S. firms are having excellent results selling a wide range of products in Czechoslovakia today.

In 1975 the U.S. Department of Commerce will support an active program of trade missions to Czechoslovakia and participate with a large exhibit at the Brno Engineering Fair in September. The themes for each of these events dovetail with sectors of the Czechoslovak economic plan.

Mozambique Puts Imports In Five Priority Categories

New controls on imports into Mozambique give first priority to products required for consumer needs and economic development activities. These include: pharmaceuticals and similar products; products and equipment for cattle ranching; fuel and lubricating oils; spare parts and accessories for machinery, vehicles and equipment; and raw materials for high priority industries. Second priority commodities deemed essential are raw materials and equipment for use in lower priority productive activities. Commodities considered less essential are accorded third priority. Fourth priority is given all nonessential commodities, and items classified as luxuries or superfluous are of lowest or fifth priority.

Whether the importation of a specific item is unrestricted, restricted in relation to local production, subject to quota or prohibited is indicated in a long commodity list attached to the regulations. Within the limits of foreign exchange availabilities, Import Registration Bulletins (BRIs) will be issued for import of commodities in the first, second and third commodity categories.

In submitting applications for BRIs, importers must accord preference to first, second and third priority items which domestic production is unable to satisfy either in quality, price or quantity. Neither BRIs nor import quotas are transferable from one importer to another without approval of Mozambique's Department of Commerce.

A summary in English and a copy of the Portuguese text of the regulations, which were issued in March, are available from Commerce's Africa Division, Office of International Marketing, phone 202-967-4927.

Canada Restores Bicycle Tariffs

Canada has restored tariffs on imported bicycles to the 20 percent British Preferential Tariff and 25 percent Most-Favored-Nation levels obtaining before Nov. 19. The MFN rate applies on imports from the United States. The Nov. 19 tariff reduction to 15 percent was to have remained in force until June 30, 1976, but the Finance Ministry indicated that the reduced tariffs were having an adverse effect on Canadian bicycle production and industry employment.

Gradual Recovery Lets Upper Volta Start On Projects

Upper Volta is slowly recovering from the effects of a devastating seven-year drought. According to the U.S. Embassy in Ouagadougou, several new projects on tap may encourage U.S. firms to play a more active role in the West Africa country.

The summer rains of 1974 were sufficient to allow normal planting and harvest expectations are cautiously optimistic. Livestock, the nation's main export, is faring much better because of improved pasture conditions. Isolated areas still exist in northern parts of the country where suffering has been serious. Foreign donors provided over 100,000 tons of foodstuffs to alleviate this hardship. Total aid in 1974 was nearly $70 million, about half for drought relief purposes. Upper Volta, in coordination with international donors, is presently planning a program of medium and long-term development to tackle basic problems of the Sahel.

The drought, fortunately, has had only a slight effect on the modern, commercial sector of the economy in the urban centers. Imports have increased and a number of light industrial establishments have even been created. The Voltans are pursuing a policy of Voltanization designed to increase government interest in local business and financial activities. Upper Volta's fiscal position remains reasonably sound; the budget is balanced ($60 million) and the balance of payments, thanks to the sizable inflow of foreign aid and workers' remittances, is slightly positive. The country does not have a serious debt-servicing problem.

The Voltan market has traditionally been of minor importance to American firms. The low level of purchasing power, small size, and special trade links with Europe have been the main obstacles. U.S. exports have generally averaged about $2 million a year while Voltan exports to the United States remain miniscule.

New initiatives in agriculture plus exploitation of mineral resources will create new opportunities for supply of goods and know-how. American businesses will be able to compete for business on projects financed by non-tied sources. Key areas of concentration will be livestock production, range management, water resources, health facilities and infrastructure. Well-drilling and earthmoving machinery, cattle transport equipment, health equipment and instruments, and farming tools are among items that will be needed.

Dependability is a paramount factor in the selection process since after-sales repair facilities are limited in Upper Volta. U.S. firms with EEC affiliates may be in a better position to compete. Consulting/engineering firms with French-speaking personnel will also find opportunities. Lyons Associates and TAMS are examples of American companies successfully undertaking development projects in Upper Volta. The World Bank's $8 million Bougouriba program in the southwest and U.S. AID's $3 million integrated rural development program in the Fada N'Gourma region will require equipment.

Possibilities for sales of consumer products are limited and are likely to remain that way. Best chances for U.S. firms are in foodstuffs, used clothing, electrical equipment (especially airconditioners), housewares and pharmaceuticals. A local agent or representative is a must and, whenever possible, a qualified African firm should be selected. Marketing efforts should emphasize the personal touch and trade literature must be in French in order to be effective.

Access to the local market should improve as greater economic cooperation between neighboring states progresses. Upper Volta shares a common language and currency with six other countries which form a regional market of some significance. Regionally-targeted marketing efforts geared to the larger coastal states can produce additional sales by including the Voltan market.

Upper Volta's under-developed economy offers few investment opportunities for American capital. The best chance for U.S. participation will be in exploitation of mineral deposits. The $90 million Tambao manganese project (10 million tons) is the most important of these. A multinational consortium involving Japanese, European, and American interests has been formed to develop the deposits. Donors have pledged enough aid to permit construction of the 345 km. railroad from Ouagadougou to the ore site to begin. Supply requirements will include ore extraction and transportation equipment. Copper deposits near Gaoua and vanadium and bauxite in the north present additional possibilities for investment.

The Voltans are also seeking to attract foreign investment/expertise for processing plants as part of their economic diversification program. The Director of Industrial Development maintains a priority list of projects and would be pleased to discuss specifics with any interested firm. Examples of projects for which the government is seeking outside capital include processing of poultry products, vegetable canning, cotton clothing, leather goods, a tomato paste plant, and corn beef processing.

Total foreign investment at the end of 1973 was estimated at 3 to 4 billion CFA ($13-$17 million), of which about 60 percent is French/European. U.S. investment is limited to participation in minority shares of local commercial banks, petroleum distribution, and one agribusiness venture. The Voltans have a liberal investment code which grants tax and customs exemptions (up to 25 years in certain cases), tariff protection, eased foreign currency restrictions and guaranteed arbitration.

RAINS BRING HARVEST FOR UPPER VOLTANS—*These piles of sorghum sacks in a Ouagadougou market reflect improved conditions resulting from 1974 summer rains.*

Ghana Getting Its Finances In Order; Investors Study Viability Of Projects

Sound economic planning will be necessary if Ghana is to overcome decade-long stagnation in its per capita income growth, according to James E. Walker, Commercial Attache at the U.S. Embassy in Accra.

Although an abundance of hydroelectric power provided by the Akosombo Dam and a refinery at Tema for processing crude oil make Ghana less vulnerable to the fuel crisis than many other developing countries, its economy and foreign exchange reserves have been affected by the sharp rise in the price of petroleum. During much of 1972 and 1973 high prices for cocoa and timber, which represent about 65 and 13 percent respectively of the West Africa nation's export revenue, afforded healthy foreign exchange reserves and balance of payment surpluses. The increase in petroleum prices in 1974—Ghana imports all of its requirements—plus a building slump in Western Europe, helped produce a balance of trade deficit of $107.8 million for the first 10 months of that year.

The Government of Ghana recently presented guidelines for its Five-Year Development Plan, emphasizing low-capital, labor-intensive investments and giving central importance to agriculture. A 5.5 percent average annual growth in GDP is envisaged to counterbalance an expected 2.7 percent annual rate of population growth over the next five years. The Plan itself is scheduled to be published this summer.

A $19 million U.S. AID program loan signed in November should give a boost to Operation Feed Yourself, a Ghana Government program aimed at making the country self-sufficient in food production. The loan will provide Ghana with hard currency to finance foreign exchange costs of agricultural machinery and equipment plus other priority items. The government is also trying to encourage expatriate firms to invest in agricultural projects by offering accelerated conversion of profits into foreign exchange as an incentive. Kaiser Aluminum and Chemical Corp. may establish a 6,000-acre rice farm in the Accra Plains if feasibility studies prove that the project is viable.

Walker sees good opportunities for U.S. businessmen interested in investing in Ghana. The book value of American investment is about $200 million and includes equity in an aluminum smelter, a tire factory and rubber plantation, a plastics and battery factory, and a tuna fishing operation.

A major bauxite mining project, presently under active consideration, could add another $200-$300 million to that total. The Bauxite Alumina Study Group (BASCOL), comprising Kaiser Aluminum and Chemical Corp. and Aluminum Resources Development Co. of Japan (ARDECO), is studying the feasibility of setting up mining operations and constructing a 600,000-ton per year alumina conversion plant in partnership with the Government of Ghana at Kibi, 60 miles north of Accra. Half of the plant's output would be earmarked for use in Ghana by the Kaiser and Reynolds-owned Volta Aluminum Co. (VALCO) smelter at Tema, which now imports its alumina from Jamaica. Besides reserves at Kibi, estimated at 300 million tons, other large bauxite deposits are believed to exist at Nyinanin in the Ashanti Region.

Ghana is also believed to have rich untapped deposits of iron ore and limestone, in the Opon-Menso area of Western Ghana and the Taco basin, respectively. Krupp has been commissioned by the Government of Ghana to conduct a feasibility study on the iron ore deposits. Ghana's small cement and steel industries could profit from exploitation of these minerals. A number of companies, most of which are American owned, are exploring for oil both onshore and offshore in hopes of supplementing the small find made at Saltpond several years ago by the Signal, Amoco, Occidental consortium.

The Government of Ghana is actively encouraging foreign investment in a number of resorts and hotels which it hopes to build within the next few years. Tax and other concessions are available.

Other upcoming or tentatively planned projects which could be of interest to U.S. businessmen include projected hydroelectric dams at Kpong and Bui, and planned upgrading of the country's telecommunications network—both of which need funding, and repair and rehabilitation of 340 miles of Ghana's trunk road system. A private European group is proposing a free port industrial area around Tema.

Financed by a $13 million IDA loan, the road rehabilitation venture is divided into 13 projects and will be phased over the next 3 years. Contractors have already bid on the first three projects. Other sections should be tendered shortly.

Potential investors should be aware of the 1973 "Outline of Ghana's Investment Policy"—a Government White Paper which prescribes the share of Ghanaian ownership required in various areas.

Import licenses are required for most items imported into Ghana. In September, due to a shortage of foreign exchange, the government halved the value of unutilized portions of import licenses, and has been slow to give out new licenses during the first few months of 1975. Between early 1974 and 1975 the country's foreign exchange reserves fell from about $150 million to just under $50 million.

Ghana has been very successful in meeting trade bills after abolition of the 180-day import credit system in early 1972, when it went on a current basis of providing foreign exchange for new transactions. Some bills prior to this date remain to be paid, but the government is working methodically to provide foreign exchange to meet these obligations. The country is also beginning to get new foreign aid, since all parties agreed to rescheduling its medium-term debt which had earlier been repudiated.

The Third Ghana International Trade Fair is scheduled to be held in Accra Feb. 1-15, 1976, and will have U.S. Department of Commerce support.

New Ghana Business Magazine

The Ghana Manufacturers' Association, a group representing most private manufacturers in the country, has announced the publication of a quarterly magazine, *The Ghana Manufacturers*, carrying editorials and advertising material of interest to foreign customers and suppliers. Local cost of the magazine is listed as 40 cedis ($0.35) per issue. Prices for foreign subscriptions are unknown. Further information may be obtained from Ghana Manufacturers Assn., P.O. Box 2616, Accra.

GHANA'S MILLIONTH TIRE—*U.S. Ambassador Shirley Temple Black inspects the millionth tire produced at the Firestone (Ghana) Ltd. factory at Bonsaso. At the Ambassador's left are Lt. Col. Alhadji D. A. Iddisah, Commissioner for Trade and Tourism (partly hidden), and Lt. Col. George Minyila, Commissioner for Industries. A factory worker helps hold the tire.*

Costa Rica Slump, New Import Curbs Color Prospects

The outlook in Costa Rica is for a period of stagnation or even decline in economic activity. The government has had to take severe measures to protect its balance of payments position, notably consumption taxes varying from 50 percent to 100 percent on imports. These measures are expected to reinforce the tendency toward economic decline that appeared toward the end of 1974 with the result that GNP growth, which was about 4 percent in real terms in 1974, may be nil in 1975, according to the U.S. Embassy in San Jose.

The United States is Costa Rica's most important trading partner and has provided in recent years a one-third share of imports. During the first three quarters of 1974, the U.S. market share held steady as total imports increased sharply. Imports from the United States for the nine months were $170.8 million, 7 percent more than for the full year 1973. U.S. sales to Costa Rica in 1975 are expected to continue at a high level, but import restraints, imposed for balance of payments reasons, are expected to hold total imports to about the 1974 level.

Trade opportunities in 1975 will be particularly attractive in capital goods, including construction, electrical power generation and communications equipment. Credit controls established in November and the consumption taxes imposed in January, which are directed mainly at non-essential consumer goods, will no doubt reduce imports of such items as automobiles, home electrical appliances, hi-fi equipment, televisions, radios, etc.

SAN JOSE SCENE—*This Pizza Hut is a joint venture of U.S. and Costa Rican capital.*

Costa Rica offers an expanding market for U.S. agricultural commodities. The country is short of proteins and what little is produced goes for human use; increasing imports of animal feeds will be needed to support the expanding livestock sector. Livestock for breeding is another important import, and although quality of the local herd far exceeds that of any other country of Central America, local breeders will continue to purchase high quality U.S. breeding stock for further herd improvement. Some consumer food items are also imported from the United States, notably fruits and fruit juices.

A developing local food processing industry offers opportunity for sale of food processing and packaging equipment.

Major infrastructure projects will also provide opportunities for U.S. exporters:

- The Arenal Dam—A 135,000-kilowatt hydroelectric project in Northern Costa Rica which will cost $91 million, of which the Interamerican Development Bank will provide $50.5 million. The loan was approved in November and construction is under way.
- The Port of Caldera—A new Pacific seaport which will be financed by a loan from Japan. Preliminary work is now being done.
- The proposed Boruca Dam and Aluminum Project—This is under negotiation between the Costa Rican Government and ALCOA. A Norwegian consulting firm, Norconsult, is advising the government on feasibility.

No change is expected in Costa Rica's favorable investment climate, which is based on constitutional guarantees, political stability, respect for law and private property, an independent judiciary, and support by government for investments that contribute to the economic well-being of the country. Approved foreign investments are exempted from exchange controls designed to prevent "speculative" outflows, in order that dividends, interest and principal may be repatriated.

There is growing sensitivity in Costa Rica concerning large-scale land purchases by foreigners, especially for speculative purposes or non-productive uses. Squatters are also a problem in some areas both for foreign and Costa Rican landowners. Retired Americans who wish to settle in Costa Rica continue to be welcomed and may buy homes freely, but legislation is under consideration that would attempt to prevent abuses of "pensionado" (retired person) status.

Government policy on minerals investment appears to be under review. Basic decisions that will be taken on proposed projects for aluminum and copper development will make clear the direction of government policy in this important developmental area.

Investments in new hotel construction and tourist-oriented projects are likely to be at record levels during the next few years. Encouraged by a 23 percent increase in tourist revenue recorded for the 12 months ending October, investors are planning several new hotel projects. By the end of 1975 Costa Rica will have a new luxury international hotel, and at least two others are planned for 1976. However, U.S. economic difficulties may impede expansion of tourist travel to Costa Rica in the winter 1975 season, which could cause delays in expansion plans for new tourist facilities.

Burma In Market For Oil Equipment, Other U.S. Goods

Following a year of near zero economic growth in 1972-73, Burma's economy showed a mild recovery last year. Although there does not seem to be much promise for sound U.S. investment opportunities in Burma, the U.S. Embassy in Rangoon sees good prospects for increased sales of American goods as the Burmese Government moves to expand imports.

Although an almost chronic trade imbalance persists, restrictive import policies narrowed the trade gap considerably and inflows of foreign loans and grants provided a small surplus in the balance of payments last year. This allowed a substantial buildup of foreign reserves.

Agricultural output increased in the last crop year, but unsuccessful procurement policies held down the share of the crop obtained by the government. Rice exports had to be suspended, thus reducing foreign exchange earnings and placing an even greater restraint on imports. Timber, mineral and industrial production stagnated, but prospects for increased petroleum output are good. Prices rose due mainly to expanded money supply, food shortages and the general worldwide inflationary trend.

Public discontent with the political and economic situation in Burma led to two separate outbreaks of disorder in 1974 and this open discontent may spur the government to re-examine and liberalize some of its economic policies.

Two U.S. firms were among the four foreign oil concerns that successfully negotiated contracts for offshore oil exploration with the Burmese Government. Substantial subcontracts related to drilling

will go to U.S. firms, and one has the contract to provide helicopter service between the rigs and the mainland and to ferry oil company personnel between Rangoon and Singapore. Thus, U.S. business presence in Burma will greatly expand in 1975.

The government continues to prohibit all other forms of private foreign investment. There was considerable speculation earlier last year that once the offshore oil contracts had been negotiated, the government would open other sectors, particularly minerals, to private foreign participation. This has not come about and the government seems no closer to taking such a step than it was a year ago. Given the present uncertain political and economic conditions prevailing in Burma, even should some form of private foreign participation be allowed, it would have to be preceded by sweeping economic reforms and accompanied by sound guarantees before Burma could be considered an attractive investment prospect.

Between 1971-72 and 1972-73, the level of U.S. sales to Burma was virtually unchanged, but due to the big drop in Burmese imports over that period, the United States increased its share of the import market from 5 to 8 percent, and in the present fiscal year U.S. goods are maintaining an 8 percent share. This year a combination of petroleum exploration, loans from multilateral financial institutions and a government policy of expanded imports, largely for development purposes, augur well for expanded U.S. sales to Burma.

Oil exploration and drilling, both on and offshore, will require oil drilling equipment of all kinds, either for lease or purchase. The only constraint would be availability of the equipment.

Loans from the World Bank and the Asian Development Bank for forestry, agriculture, communications, fisheries, transport, irrigation and power open a wide range of possibilities for direct sales via government tender to Burma. These loans will provide opportunities for sale of such items as earthmoving machinery, communications equipment and systems, forest extraction and mining machinery transport equipment, spare parts and other capital goods. There should also be opportunities for consultant services in connection with some of these projects.

Government buying under an expanded import program will also mean a larger market for machinery and transport equipment and spare parts. In addition, the government will probably increase purchases of chemicals and pharmaceuticals, items which the United States has traditionally supplied to Burma. Most government purchases will be by international tender; U.S. firms should be alert to the sales opportunities offered by these tenders.

International Business Reports

Revenue Statistics of OECD Member Countries 1965-1972—A Standardized Classification. Published by the Organization for Economic Cooperation and Development. 258 pp. $8.25.
According to the OECD, this represents the most comprehensive compilation of national tax revenues so far issued on an internationally comparable basis. It lists receipts from all taxes in OECD member countries under 7 main headings and 40 sub-headings, with a commentary defining the scope of each, and a general guide for users of the classification system. In addition to 66 tables giving details of tax revenues on a country-by-country basis, the report contains 28 comparative tables illustrating differences between countries.
Write: OECD Publications Center, Suite 1207, 1750 Penn. Ave., NW., Washington, D.C. 20006.

Rotterdam Yearbook 1975. 14th edition. 184pp. Dfl. 14.75 (approximately $6).
Discusses port and seagoing shipping through the Port of Rotterdam, Rhine transport, road transport, banking and insurance, Rotterdam Airport activity, industry and wholesale trade.
Write: Der Hafenkurier, Rotterdam-2, Westblaak 180.

Japanese Companies' Overseas Investments. 355pp. 37,000 yen airmail.
According to the publishers, this directory was "compiled and designed as a practical reference source of information on all aspects of Japan's overseas investments and Japanese companies' activities overseas." Classifies more than 800 companies by country and industry.
Write: Dodwell Marketing Consultants, C.P.O. Box 297, Tokyo.

The Financial Post's Survey of Markets, 1974-75. 340 pp. $14.
Contains marketing data on Canada's provinces, cities and towns, plus a special statistical section that shows trends in key sectors. Also included is a guide to buying power by market areas.
Write: The Financial Post, 481 University Ave., Toronto, M5W 1A7.

Calendar For World Traders

April 30 — Springfield, Mo. — Greater Ozarks International Trade Club dinner meeting, King's Table Cafeteria. Speaker: Lt. Governor William C. Phelps.

May 1—Memphis—Mid-South Exporters Roundtable dinner meeting, Monte's & Sons Restaurant.

May 2—Tuscaloosa, Ala.—Alabama-Mississippi District Export Council meeting, North River Yacht Club.

May 6-7—New York—Conferences on New Opportunities in Yugoslavia, World Trade Center. Charles W. Hostler, Deputy Asst. Secretary for International Commerce, will discuss Commerce Department aids in support of U.S. trade with Yugoslavia.

May 7—Atlanta—Investment in World of OPIC, Top of the Mart. Sponsors: Citizens & Southern Bank, Trust Company Bank, Fulton National Bank, First National Bank of Atlanta.

May 7-9—New York—International Executive Institute workshops on Pacific Basin and Latin American Venture Development, Americana Hotel.

May 8—New York—Practising Law Institute seminar. Rauer Meyer, Director of Commerce's Office of Export Administration, will speak on Exporting—Governmental Assistance and Regulation.

May 8—Appleton, Wis. — Northeastern Wisconsin World Trade Conference.

May 8—Phoenix, Ariz.—Seminar on Doing Business with the Major Oil Producing Countries of the Near East. Robert Shaw of the Commerce Action Group for the Near East will speak. For information, Phoenix Commerce District Office, 602-261-3285.

May 8—New York—Overseas Automotive Club luncheon meeting, Summit Hotel.

May 8-9—New York — Conference on East-West Trade, Hilton Hotel. Arthur T. Downey and Daniel Stein of Commerce's Bureau of East-West Trade will speak. The same program will be held in Chicago, Ambassador Hotel, May 13-14.

May 12-13—New York — Seminar on Export Development: Fundamentals of Marketing, World Trade Institute.

May 12-14—New York — Briefings on business prospects in Iran, Saudi Arabia and Egypt, AMA.

May 12-16—Ann Arbor, Mich.—Seminar on Effective Ways to Expand Your Markets in the World Through Exports, Ann Arbor Inn. For information: Frixos G. Massialas, 313-763-1387.

May 14—Seattle—1st Annual International Trade Conference, Seattle Center. Tilton H. Dobbin, Commerce's Asst. Secretary for Domestic and International Business, will speak on Energy and its Effect on International Trade.

May 14—New Orleans—FCIB International Roundtable Conference on Finance, Credit, Collection & Exchange Problems, in conjunction with 79th Annual Credit Congress.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, and details on major construction and expansion projects.

Licensing, Investment Abroad

CHILE—Corporacion de Fomento de la Produccion invites bids for equity in its **leather tanning plant,** Curtiembre y Suelerias Norte. Basic information available from Enrique Barraza, Project Manager, Corporacion de Fomento de la Produccion, One World Trade Center, Suite 5151, New York, N.Y. 10048. Phone 212-466-6721. Bids are to be received not later than May 16 and mailed directly to CORFO, Moneda 921, Of. 520, Piso 5° Sanitago, attention of General de Brigada Javier Palacios, Vice Presidente Ejecutivo. P-75264.

SWITZERLAND—Large, diversified manufacturer seeks direct contact only with U.S. manufacturers of following types of products: **(1) novel synthetic textile fibers, including textile finishing processes such as dying, impregnating; (2) synthetic materials for flooring, for covering tennis courts and other sporting facilities in form of sheets, plates and reels; (3) self-adhesive foils for wall coverings for building industry, and for industrial and do-it-yourself applications; (4) novel types of foils for packing of food and for general kitchen and household applications; (5) garbage and waste compactors for medium sized industrial companies, for commercial and household use (electrically and pneumatically/hand-operated units); and (6) leisure time items and novel types of sporting equipment.** Company wants to obtain licenses. Has manufacturing plants in four countries and established sales networks in COMECON, Far Eastern, other European and African countries. Firm employs over 3,000 persons. John E. Hall, U.S. Embassy, 93/95 Jubilaumsstrasse, Bern. P-75270.

0910—INDONESIA — Majority interest is offered to U.S. firm experienced in **shrimp, tuna and shark fishing.** Present partners, 75 percent Hong Kong and 25 percent Indonesian, claim to hold two large exclusive concessions in Indonesian Archipelago. Waters said to be rich in shrimp, tuna and sharks on basis of government study. U.S. partner would be expected to provide fishing techniques, processing plan, know-how, and marketing channels for shrimp and tuna. Howard T. Drue, 611 Gloucester Bldg., Hong Kong. Cable: NANFENAMEL Hong Kong. WTDR. P-75274. OPIC.

2000—KENYA—Industrial Survey and Promotion Centre has done a market study on investment opportunities in **food processing.** Seen as having good prospects are dehydrated vegetables, canned asparagus, tomato paste, mushroom canning, mango processing and other prepared foods. Centre would be glad to assist local and foreign investors interested in investigating food processing opportunities. Industrial Survey and Promotion Centre, Ministry of Commerce and Industry, P.O. Box 30430, Nairobi. In contacting Centre, please provide information on firm's background, experience, technology. P-75271. OPIC.

2079—TAIWAN—Firm seeks technical cooperation with U.S. firm to manufacture **margarine and shortening.** Proposal calls for investment of $1 million. U.S. financial participation not desired. Time table for projected plant to start production set at end of 1975. Contact Firm ASAP: George K. S. Chang, Big Three Nutriment Enterprise Co., Ltd., P.O. Box 58577, Taipei. Cable: CLIMAXINCO Taipei. P-75269. OPIC.

2095—BRAZIL—U.S. joint venture partner is sought to expand **coffee processing and distributing operations.** Minimum investment of $2 million required. Firm has well equipped and well staffed (250 employees) plant in State of Parana. Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. WTDR. P-75273. OPIC.

2600—UNITED KINGDOM—Large British paper company seeks **distributorships, licenses or joint ventures to produce and sell paper and paper related products.** Company is interested in products that are at an early stage in their market development in U.S., but capable of transfer primarily to U.S. Ample investment capital and business skills are available to exploit new products. British group currently in papermaking, converting and distributing on worldwide level. It employs 18,000 worldwide, 12,000 of them in U.K. where it is largest maker of specialty papers. Firm has 12 paper mills and 7 plants in U.K., several mills in several foreign countries and 75 sales offices and warehouses in over 30 countries. D. Cummings, New Enterprise Studies Strategic Development, Wiggins Teape Research & Development Ltd., Butler's Court, Beaconsfield, Bucks HP9 1RT, England. P-75282.

2741—MEXICO—Seeks license to produce **systematic instructional and educational printed materials.** Would include technical know-how, patent and trademarks. Newly established firm. Mrs. Maty Meyer, Didacticos Mexicanos, S.A., Aristoteles 169, Mexico 5, D.F. Telephone (direct dial from U.S.), 905-531-2138. P-75259.

2819, 2869, 2992—AUSTRALIA — Seeks contacts in U.S. to discuss purchase of technology to produce **organic and inorganic chemicals and sulfited oils** in Australia. Also interested in agency/distributorships for these products. Small firm planning vigorous expansion. Currently produces and markets fatty and oil base chemicals, surfactants, specialty lubricants, organic esters and related products. Managing director to visit New York June 16-20. Interested manufacturers should contact him before June 4. Brian T. Cunningham, Managing Director, Beacon Chemical & Engineering Corp., Pty. Ltd., P.O. Box 179, Moorabbin, Victoria 3189. P-75280.

2821—UNITED KINGDOM—Seeks licenses to manufacture **thermoplastic polyurethane polymers,** particularly for adhesives. Firm employs 1,300 and has annual sales of $31 million. Interested firms should write: John R. Savage, Assistant Commercial Attache, U.S. Embassy, 24 Grosvenor Square, London W1A 1AE, England, citing licensing opportunity No. 32. P-75272.

2834—ECUADOR — Seeks licenses, trade names and know-how to manufacture **serums, analgesics, tranquilizers, anesthetics, antacids, digestives, vitamins and dentifrices.** Also suggestions about equipment to be purchased. Firm has necessary financial resources. Leonardo Polo, Manager, Productos Farmaceuticos Cuenca S.A., P.O. Box 260, Cuenca. WTDR. P-75258.

2865—ITALY—Seeks to license know-how and engineering to produce **10,000 metric tons of coal tar enamel** annually. Established in 1904, firm operates 3 plants, employs 550 and has annual sales of $30 million. Carbochimica Italiana S.p.A., Viale Regina Margherita 5. WTDR. P-75260.

3079, 3542—UNITED KINDOM — Firm seeks licensing arrangement in **plastic and sheet metal machining and assembly work.** Interested firm is manufacturing company which is division of the substantial U.K. Plantations Holding Group. Currently manufactures electronic test control systems and scientific instruments. Firm also carries out subcontract work in plastics and sheet steel machining and assembly work. Established 1965, employes 200 skilled personnel and has current annual turnover of $4.6 million. M. R. Oliver, Shandon Southern Products Ltd., 95 Chadwick Road, Astmoor Industrial Estate, Runcorn, Cheshire WA7 1PR, England. P-75279.

3274—DOMINICAN REPUBLIC — Established company **manufacturing lime** in Santo Domingo is seeking investment partner who would contribute approximately $200,000 for 20 percent share of firm. Capital would be used for purchase of a third vertical lime kiln. Company currently has paid in capital of $1 million. Ramon Vila P., Industrias Nigua, C Por A, AV San Cristobal, Santo Domingo. Telephone, 565-5518; telex, ITT 3460333; cable, NIGUA. P-75268. OPIC.

3293—INDIA—Southern Industrial Corp. Ltd. (SICL) seeks U.S. technical collaboration for proposed project to be established to manufacture annually 2.5 million **automobile oil seals.** Sponsors have obtained from Government of India letter of intent (approval in principle) to set up project. SICL, established 1955, is large firm manufacturing mild steel, brass screws, flexible shaft machines, speedometer and remote control cables for automotive vehicles. Its annual sales are over $1 million. S. Shanmugam, Executive Director, Southern Industrial Corp., Ltd., South India House, 99 Armenian St., Madras 600001. WTDR. P-75263. OPIC.

3448—UNITED KINGDOM — Firm interested in manufacturing agreement in products falling into gardening/horticultural area, in do-it-yourself home improvement area, such as **garden furniture, garden buildings.** Company is brand leader in U.K. aluminum greenhouse market with extensive sales and distribution outlets. Serving local and overseas markets. Peter J. Bain, Managing Director, Edenlite Ltd., Hawksworth, Swindon, Wiltshire SN2 1EQ, England. P-75266.

3500-3600—BRAZIL — Major importer and agent plans to expand its activities based on its wide relations with local manufacturers. Wants to represent U.S. companies prepared to provide machinery, technology, and equipment in following: (1) **mining;** (2) **steelmaking;** (3) **avionics including flight control, navigational instruments and aeronautical testing equipment;** and (4) **telecommunications to include microwave, color TV broadcasting, studio and audiovisual teaching equipment.** Company presently imports measuring, registering and control instruments, has a strong reputation. Dr. Adalberto Goncalves Leite, Director, Commercial Goncalves Eletricidade e Automacao Ltda., Rua Florencio de Abreu 559, 01029 Sao Paulo (SP). WTDR. P-75262. OPIC.

3500—ITALY—Large group of companies operating in Sicily seeks licenses and technical know-how in following three areas: **Pollution control**—systems and controls for purification of liquid and solid wastes and abatement of air pollution; **heating and cooling (air conditioning) systems**—heating and air conditioning systems, equipment and controls for industrial, residential and commercial use (particularly interested in systems for recovering heat as an additional source of energy); **plastic and concrete water pipe**—produce machinery and systems to manufacture plastic and concrete water pipe from .60 to 2.50 meters in diameter, 10 to 15 atmosphere working pressure and with 23 atm. test pressure. Rendo Group includes some 17 companies operating in such diversified fields as construction, construction equipment, agriculture, and raising of livestock. All are owned by members of Rendo family. Group has several thousand employees, reports annual sales of $16 million. Group is planning to diversify into new fields; potential exists for joint ventures. Ing. Fabio Gervasio, S.A.E.M., Casella Postale 334, Catania. Telex 98154 SAEM. WTDR. P-75265. Interested U.S. firms are requested to send a copy of their correspondence to U.S. Embassy, Rome, Via V. Veneto 19, APO New York 09794.

3551—UNITED KINGDOM—Manufacturer of heat sealing equipment and carton erecting, forming and closing machinery seeks licenses to make **related packaging equipment.** Company is prepared to market in Europe and provide after sales service. It employs 150, is part of major group. M. J. Howell, Whitehall Machinery Ltd., Chalks Road, Whitehall, Bristol BS5 9 ER, England. P-75246.

3559—GERMANY—Seeks license to produce **bagfilters for handling fine dust.** Filters would be sold to chemical and power industries. Presently, German concern makes electrostatic precipitators and air purification equipment. Heumann, American Consulate General Duesseldorf, Box 515, APO New York 09080. P-75247.

3559—ITALY—Seeks license to manufacture **pollution control and product recovery equipment.** Particularly interested in construction of equipment for **dust abatement control.** Needs know-how, engineering as well as technical assistance during preliminary study and design phases and in start up of plants. Company designs and builds plant and equipment for transportation, lifting and size reduction of loose products. It supplies equipment to highly polluting industries such as cement, refractories, fertilizers, sulphur minerals, lime and iron-ore. Ing. Prof. Mario Mazza, Administratore Unico, S.I.C.A.I., Corso Venezia 37, 20121 Milano. WTDR. P-75261.

3562—INDIA—Firm seeks U.S. technical collaboration and wishes to import complete plant for production of **ball bearings.** Karnataka Ball Bearings Ltd., affiliated with Deepak Insulated Cable Corp. has obtained letter of intent from Government of India to manufacture annually 3 million ball bearings, 1 million taper roller bearings, and 500,000 cylindrical roller bearings. Technical collaboration should be for minimum of 5 years and include know-how for manufacture of other types of bearings such as spherical roller bearings and ball thrust bearings. Prospective American collaborator may, if interested, participate in equity capital. A. P. Mehta, Managing Director, Deepak Insulated Cable Corp. Ltd., 8th Mile, Bangalore-tumkur Road, Dasarahalli 562139, Bangalore. P-75281. OPIC.

3569—SWEDEN—A major manufacturer of turbojet engines seeks licenses to manufacture **pollution control and environmental protection equipment.** Firm presently makes gas emission control apparatus, flame incinerators and catalytic incinerator systems. It is interested in technology used in destruction of liquids and industrial waste water containing organic impurities. Through production of turbojet engines and hydraulic equipment, company has developed technology in flow techniques, heat resistant materials and system design. Firm carries out extensive research and development, has highly qualified staff of engineers. Operates modern facilities equipped with most sophisticated machinery. Eric Overgaard, Volvo Flygmotor AB, Environmental Protection Division, S-461 01 Trollhattan. Telephone, 0520-301-00; FLYGMOTOR; telex; 42040. WTDR. P-75278.

3589—GERMANY—Seeks license to manufacture **solvent recycling equipment.** Particularly interested in equipment using absorption and/or absorption methods. Juergen Duehring, Industrie-Beratung und Vertretung, 5202 Hennef 1-Soeven, Hauptstrasse 49. P-75248.

3612—UNITED KINGDOM — Very large manufacturer of **power supplies, transformers, chokes and other iron cored components seeks licenses. Wants to manufacture similar or compatible products.** Firm's range of products includes power supply units, magnetic amplifiers, core reactors, constant voltage transformers, filters chokes and miniature transformers for printed circuits. Company reported 1973 sales of over $700 million, employs around 35,000. J. T. Storey, Director, Delta Metal Electronics Ltd., Field End Road, Ruislip, Middlesex HA4 0QG, England. P-75249.

3613—ISRAEL—Major designer, manufacturer and contractor of **electrical systems** seks joint venture. Offers up to 50 percent equity in return for capital investment of $2 million. Company operates two plants in Israel producing control panels, low-tension switchboards and electrical accessories. Is also distributor for large number of U.S. and European firms. Has construction subsidiary in Iran. Israeli firm seeks U.S. partner that can contribute, if possible, to managerial and marketing aspects of enterprise. American investor can help in introducing new marketing outlets for Israeli firm's products and assist in expansion of Iranian subsidiary. Akiva Amir, Director of Overseas Operations, Asher Feuchtwanter Ltd., Electrical Engineering, 15 Pinsker St., P.O.B. 4857, Tel Aviv. Telex: 33665. WTDR. P-75250. OPIC.

3621—UNITED KINGDOM—Seeks license to produce **fractional horsepower motors and geared motor units.** Firm is member of large group of companies engaged in manufacture of electronic equipment. R. P. L. McMurtrie, Managing Director, Southern Instrument Holdings Ltd., 16 The Broadway, Stanmore, Middlesex HA7 4DW, England. Telephone: 01-954-6206/8. P-75251.

3622—UNITED KINGDOM—Seeks licensing and distribution agreement to manufacture **high technology products for process-control industry.** Firm presently makes digital electronic instrumentation and process control systems, skid mounted systems, terminal automation and lube-oil dehydrators. Established in 1961, employs 76. A. C. Jones, Group Sales, Jiskoot Autocontrol Ltd., Tunbridge Wells, Kent TN1 2DJ, England. P-75252.

3675—UNITED KINGDOM—Manufacturer and distributor of mica, polystyrene and ceramic tubular electronic capacitors seeks license. Wants to produce **new thick film products, capacitors or associated components, and other passive components comple-**

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

Greek Development Bank Lists Favorable Investment Sectors

The Hellenic Industrial Development Bank, chartered by the Greek Government to promote investment and development, has issued a list indicating sectors of Greek industry which it believes offer profitable opportunities for new direct foreign investment.

Food and Beverages: meat processing and by-products, preserved vegetables and fruits, baby food, wine. **Textiles:** wool, cotton, ready-made garments. **Leather and Furs:** leather processing, footwear, leather items. **Wood and Paper:** furniture, paper and cardboard items. **Chemical products:** petrochemicals, rubber products, acids and bases and salts, organic dye stuffs, varnishes, inks, pharmaceuticals, glues. **Basic Metallurgy:** iron, steel, non-ferrous metals. **Metal Products except Machines:** spare parts in general, hand tools, cast-iron items, other metal products. **Machines:** various opportunities. **Electrical Equipment:** electrical machines, fluorescent tubes, electronic material. **Transportation:** rolling stock, automotive industry, automotive spare parts. **Mining:** various ores.

For additional information write: Hellenic Industrial Development Bank (ETBA), 18 Eleftheriou Venizelou, Athens 135.

mentary to its present product line. Firm employs 500, has 20 salesmen. J. B. Hodgson, Managing Director, Stability Capacitors Ltd., Cranes Farm Road, Basildon, Essex, England. Telephone; Basildon 21262; telex, 99456. P-75277.

3679—SWITZERLAND — Seeks licenses to manufacture **EDP peripheral systems and industrial electronic controls.** Products of interest include tape punchers, tape readers, printers and cassette units, also process controls, related analog/digital interfacing systems and multiplexers. Swiss company produces electronic alarm and industrial security systems. It also services U.S. made EDP peripheral equipment including sophisticated data display terminals. Mr. Hungerbuehler, Hungerbuehler Electronic, Langgasse 1c, 3600 Thun. P-75253.

3679—UNITED KINGDOM—Seeks to manufacture under license, sub-contract or similar agreement **printed circuits to discrete and integrated specifications.** Also, **complete printed circuit board reproductions from assembly to installation.** In addition, company has capacity to produce **electronic equipment for entertainment and communication systems.** Firm presently makes electrical, electronic, electro-mechanical and static systems, instrumentation and test gear. Operates modern, well equipped facility. Has own design department, development laboratories and terminal inspection capability. Employs 100. W. E. Bartholomew, Hi-Fi Ltd., Hi-Fi Works, Station Road, Cradley Heath, Warley, Worcestershire, England. P-75254.

3679—UNITED KINGDOM—Seeks licenses to manufacture **electronic equipment for life sciences, general scientific instruments and sophisticated electronic equipment.** Firm presently designs, produces and sells electronic scientific instrumentation. K. J. Kapota, Managing Director, BRD (Electronics) Ltd., 32 Cottimore Lane, Walton-on-Thames, Surrey, England. P-75255.

3961—MEXICO—Producer of costume jewelry seeks joint venture with a U.S. firm for manufacture of **costume jewelry.** Desires technical assistance and installation of equipment. Active in costume jewelry manufacturing 25 years. Sr. Tomas Yanez Diaz, Calzada Tuyehualco 8542, Colonia Tlahuac, Mexico, D. F. Telephone (direct dial from U.S.), 905-672-1266. P-75267.

7999—KENYA—Firm seeks U.S. joint venture partner to make modest investment in **tour guidance service;** 25 percent is offered. Company's present operations include organization of game park safaris and other excursions for tourists. U.S. partner would be expected to publicize tours in U.S. while Kenyan firm would handle "ground operations" of clients once they are in Kenya. Company was registered in 1970. Name and address of person to contact for additional information available from Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-75275. OPIC.

Licensing In U.S.

For additional information on these opportunities to manufacture foreign firms' products in the United States under a licensing agreement or in partnership, write the Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2248), referring to the appropriate file number.

FRANCE—Medium size company is interested in cross-licensing arrangement for manufacture of its waste and slush aerators in U.S. File 2730

GERMANY—President of a public utilities company is offering for manufacture in U.S. his new method of sealing leaking gas pipelines. Foamed hydrous plastic dispersion or emulsion is pumped into leaking pipe, and through sedimentation, foamed plastic forms sealing film inside pipe. File 2731

GERMANY—Small firm offers for manufacture in U.S. its automatic rubbish press which compresses waste by 80 to 90 percent of original volume. File 2732

GERMANY—Company is offering for production in U.S. its heavy-duty centrifugal fans, heavy-duty axial flow fans and air handling installations for plants, department stores, and public buildings. Firm is interested in cross-licensing. File 2733

GERMANY—Company is offering for manufacture in U.S. injection molded "washbox." It is shaped like small piece of luggage; has separate compartments for 3½ gallons of water and for towel, rag, soap, and other items. Can be used by travelers, boaters, campers, picnickers. Company is interested in manufacturing for U.S. company plastic novelties with industrial applications or consumer articles. File 2734

SWEDEN—Large firm offers for manufacture in U.S. its gas emission control systems consisting of incinerators it has developed for cleaning gases. According to company, it is simple to fit the units into existing systems; they can generate heat as well as incinerate pollutants. File 2735

YUGOSLAVIA—Firm is offering licenses for its process of hermetical sealing of dry batteries in a plastic jacket, using ultrasonic welding. File 2736

YUGOSLAVIA—Company is offering licenses for its production procedure for "Redergin", a biologically active substance used in production of drugs acting as vasodilators. File 2737

YUGOSLAVIA — Company offers licenses for its amorphous Beta-Escin water-soluble production procedure. File 2738

Foreign Trade Inquiries

These trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Division, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1972 Census of Manufactures.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Heavy construction

• **16200 — KOREA** — Office of Supply (OSROK) is inviting tenders from qualified companies for design, manufacturing, supply, delivery and erection of grain handling installation for Busan Port. Only tenders for complete design and installation will be considered and tenderers will be required to submit qualifications data which will indicate competence in design, manufacture and erection of similar facilities. Project will be let on turn-key basis. Equipment required: 2 traveling pneumatic ship unloaders each with rate capacity of 400 tons per hour; 44 reinforced concrete storage bins with storage capacity approximately 79,800 tons including 27 star bins; multi-story reinforced concrete headhouse; all necessary mechanical equipment, electrical equipment and controls, and material handling equipment to transfer grain from ship unloader to storage facilities to truck, rail and barge transport; all necessary utilities, including sewer, water and electrical distribution systems. Pre-tender meeting June 18 at Busan Port Authority (BPA), 46-63, 3rd St., Daechang-Dong, Kong-ku, Busan. Tender documents including design criteria and specifications can be obtained at above authority after May 15. Tender should be submitted by Sept. 2 to Office of Supply, Seoul. Address questions concerning documents to Office of Consultant, Lyon Associates, Inc., P.O. Box 559, Gwang Wha Moon, Seoul.

Drugs

• **28300—BOLIVIA**—Supply of large quantities of pharmaceutical specialties and materials for use in hospitals. Tender No. 1/75, bid deadline June 23. Caja Petrolera de Seguro Social, Casillo 2693, La Paz. Specifications available in Spanish from Materials Division, BDC, Room 2126, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-3910.

Gum, wood chemicals

2861221—NEW ZEALAND—Gum rosin. Annual requirement up to 500 tons. Shortage of synthetic product may make reversion to natural gum economic. Firm wants indication of availability of product & price quotations.

Graviner deals mostly in fire & industrial equip. Has branches in Auckland, Riccarton & Christchurch. Cable—Mr. W. C. H. Rolfe, Mgr., Graviner (NZ) Ltd., P.O. Box 50171, Porirua. Cable: Crashfires.

Steel mill products

• **33100—IRAQ**—Supply of military type barbed wire, 20,000 coils 58.50 meters in length and 50,000 coils 117 meters in length, with following specifications: double wire gauge 11.5, double galvanized mild steel; 8-10 CM between barbs; barbs to have four points 2 CM long appr. Tender No. ORD/83/UT; bid deadline May 22. Directorate of Contracts and Purchases, Ministry of Defense, Baghdad. Tender documents available at above address.

• **33100—IRAQ**—6,565 tons metric weight, manganese and silicon ferroalloys. Tender No. 3/75. Bid deadline, May 15. Ministry of Industry and Minerals, State Organization for Engineering Industries, Central Purchasing Department, Attn: State Co. for Iron and Steel Industries, Sa'Doon St., Unknown Soldier's Square, P.O. Box 3093, Baghdad, cable Industator-Baghdad, Telex No. 2226 Soei Iraq. One copy of tender documents, including specifications, on file in Room 2001, Materials Division, BDC, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-4686.

Fabricated metal products

3497220—FRANCE—Laminated aluminum foil rolls & sheets for flexible packaging uses—foil/paper; polyethylene coated, laminated or both; important foil be glossy— 20 tons kraft, polyethylene glossy, 90gr, 30; 10 tons kraft, polyethylene glossy, 100gr, 60. Designers/mfrs. of packaging goods (plastics & paper produced by subcontractors); estab. 1969; staff of 11; English spoken; capitalized at 200 000 francs; sales of 6 million francs; sales zone: France; organization enjoys good reputation as well as good credit rating; bank ref: American Express, 2 rue Auber, 75009 Paris; B.I.C.R.N.P., 15 rue General Leclerc, St-Ouen l'Aumone-95, France. Reply to—Simon Amar, Mng. Dir., Star-Pack S.A., 7, Rue de la Sente St.-Denis, 95000 Cergy. Telex 24.006f; phone 030-40-92.

Engines, turbines

3519751—JAPAN—Diesel engine with exhaust gas controller for marine use. Must meet U.S. Coast Guard regulations, water cooled, 600 hp.-2,000 hp. Est. annual purchase $150 000. Large scale importer, exporter & distributor of industrial machinery, marine machinery & chemical products. Annual sales $33 million. Paid-in capital $4.7 million. Ref: Hong Hong-Shanghai Bank, Ltd., Osaka. Reply to—Mr. T. Shingaki, Engineer of Marine Machinery Div., Dodwell & Co., Ltd., Osaka Kagaku Sen-I Bldg., 39 5-Chome, Kawara-Machi, Higashi-Ku, Osaka 541. Cable Dodwell Ind., tel 06-203-5151; telex J63250 Dodwell.

Construction, mining, materials handling machinery, equipment

• **35320—EGYPT**—Delivery, supervision of erection and trial runs for following equipment in salt works at Port Fouad in Port Said: (a) Equipment for harvesting solar salt from crystallizing basins, handling, transportation, washing, and stacking with annual capacity of 225.000 tons; (b) Salt refining plant with annual capacity of 6 000 tons. Bid deadline July 5. Tender documents available for LE 20 from General Egyptian Organization for Food Industry, El Nasr Salines Co., 2, Avenue Leader G. Abdel Nasser, Alexandria, Egypt, or branch office at 1, 26th July St., Cairo.

Special industry machinery

• **35510—IRAQ** — Ministry of Defense, Baghdad, has issued tender No. ORD/82/75 for 500 big electric meat grinders for kitchen and 1,000 manual meat grinders. Bid deadline May 22. Tender funded by government. Tenderers must present sample. Directorate of Contracts and Purchases, Ministry of Defense, Baghdad; cable—DIFAH Baghdad.

General industry machinery

• **35630—ETHIOPIA**—Supply of 4 each air compressors, 600 cfm, 4-wheeled, pneumatic tired, trailer mounted, diesel engine driven. Bid deadline May 15. Obtain documents from: Procurement Branch, Ethiopian Highway Authority (EHA), P.O. Box 1770, Addis Ababa. Compressor should be of single or double stage rotary, vane or screw type, oil cooled, with rated capacity not less than 600 cubic foot free air per minute at 100 p.s.i. working pressure at standard rated speed. Compatible track drill and jack hammers should be supplied with each compressor. Sealed bids marked "bid documents—do not open until May 15" in quadruplicate to be sent to issuing authority along with bid guaranty in U.S. dollars amounting to 5 percent total bid price. Bids should include ex-factory price, f.o.b. shipping point, ocean freight, insurance charges, inland freight in Ethiopia, taxes and duties all separately.

Office, computing, acct. machines

35731XX — 35742XX — 3579XXX — 36511XX—AUSTRIA—Electronic computers & peripheral equip.; electronic calculators; duplicating machines; dictating & recording systems; home-type radio receivers, radio-phonograph combinations. Large importer & agent of office machinery, electronic calculators & dictating systems. Also interested in radio-receivers. Represents Sanyo Electronic calculators & dictating systems in Austria. Represented also Rapid Data, Toronto, until it became insolvent. Seeks agency for Austria only. Send full documentation & f.o.b. quotations. Terms of payment: l/c, c.o.d., or open account. Reply to—Mrs. Fiala, Herbert Fiala Gmbh & Co., KG, Mariahilfer Strasse 99, A-1060 Vienna. Tel. 579798; telex 13160 Sanfia.

Household appliances

3639961—JAPAN—Household window glass cleaning & polishing machines. Mfr. of electronic parts, capitalized at $33,000 with sales of $670.000. Ref: Chiyoda br. of Bank of Hiroshima. Interested in import distr. of household glass cleaning & polishing machines, which can be used also for polishing furniture, automobiles, etc. Reply to—Ichiro Mishima, Pres., Sanai Denki K.K., 3379 Arita, Chiyoda-cho Yamagata-gun Hiroshima 731-15. Tel: 082672-2911. Dir. sale (for resale) & dist.

Electric transmission, dist. equip.

• **36610—IRAN**—Telecommunication Co. of Iran, Ave. Korosh Kabir, Bisim Pahlavi, Tehran, has issued Tender No. 53/103 for supply of 20 000 kilometers single pair, neoprene jacketed, telephone wire. Bid deadline May 24. Tender documents available from above address for $150.

• **36610 — TURKEY** — TCDD Isletmesi Genel Mudurlugu (State Railways Dept.) Merkez Alim ve Satim Komisyonu Baskanligi, Ankara, is seeking bids for telephone-teleprinter communications equipment with latest CCITT recommendations to include automatic telephone switchboards and teleprinter stations. Bid deadline May 28. Bidding specifications may be obtained in English from Modern Translation Bureau, Karanfil Sokak 49/2, Yenishehir, Ankara, for $21.

Communications equipment

• **36620—ETHIOPIA** — Board of Telecommunications of Ethiopia (BTE), P.O. Box 1047, Addis Ababa, has issued Tender No. 4/75 for supply, supervision of installation and commission of broad band microwave radio equipment and associated apparatus for microwave network project. Bid deadline Aug. 5. Tender financed by IDA. Tender document available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230, 202-967-2939.

Surgical, medical, dental instruments

• **38410 — ECUADOR** — Instituto Ecuatoriano de Seguridad Social (IESS), Avenida 10 de Agosto y Bogota, Quito, has issued Tender No. 004-75-IESS for supply of hospital equipment, instruments, and related utensils for medical use for three hospitals and two health units. Bid deadline June 4. Terms, specifications and bidding documents available at above address for $80.

Manufacturing industries

3999907—JAPAN—Hair clippers for barber shop & home use, electric; $4 to $8 per unit. Est. annual purchase $175,000. Small scale importer & exporter of household articles. Annual sales $500,000, paid-in capital $20,000. Ref: Sanwa Bank, Ltd., Imzato Branch, Osaka. Reply to—Mr. Y. Yamamoto, Owner, Wakaba & Co., 28-Go, 9-Ban, 2-Chome, Yoshimatsu, Higashi Osaka 577. Cable: Wakaba Fuse Japan; tel: 06-727-4425.

Scrap materials

50930XX—ARGENTINA—No. 1 high melting steel scrap. Interested in receiving offers of steel scrap, has numerous requests from clients. Reply to—W. Lehmann, Owner, W. Lehmann, Mendoza 3105, 2nd Floor, Buenos Aires. Tel. 781-8744.

50930XX — PHILIPPINES — Interested in substantial quantities of steel scrap. Desires price quotation per m/t & delivery schedule. Newly estab. smelting plant registered with Philippine Securities & Exchange Commission. Reply to—Mr. K. C. Ong, In-Charge, Scrap Purchase, Cathay Pacific Steel Smelting Corp., 3rd Fl. Hascon Bldg., 1151 E. Delos Santos Ave., Balintawak, Quezon City. Tel: 25-35-51 to 55.

50930—PAKISTAN—Metal scrap (copper, zinc, aluminum, etc.). Quantity 5.000 tons. Value approx. $300,000. Wishes to import for sale to others. Also interested in long-term relationship & agency rep. Marketing territory all Pakistan. Requests c. & f. Karachi quotations against L/C. Reply to—M. O. Rizvi, Gen. Mgr., World Impex, Kutchi Galli No. 1, Marriott Rd., Karachi. Cable Gacofex Karachi; tel 235943.

5931XXX—SPAIN — Used clothing: men's suits; boys' suits: men's and boys' separate trousers. Mr. Ramirez operates an import and distribution business handling used clothing. Operates mainly in city of Melilla (the Spanish North African enclave) and in southern Spain. Cites following banks as financial references: Banco Espanol de Credito, Banco de Bilbao, Banco Popular Espanol, Banco Central, and Banco Hispano Americano, all at respective Melilla branch offices. Would like to receive quotations c.i.f. Port of Melilla. Call or cable—Mr. Jose Ramirez Medina, Owner, Jose Ramirez Medina, P.O. Box 266, Melilla, Malaga. Cable Joram; telex 77318; tel 952-684-015.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Textile goods

22993XX—ITALY — Wool tops: Fineness from 50's to 70's, quantity 2,000 M/T, est. value $6,000,000. Wool noils & wastes: Fineness from 50's to 70's, quantity 4,000 M/T, est. value $6,000,000. Wool scoured: Fineness from 50's to 70's, quantity 1,000 M/T, est. value $1,500,000. Mohair tops: Fineness from 26 to 39 MY, quantity 200 M/T, est. value $1,000,000. Mohair scoured: Fineness from 26 to 39 MY, quantity 200 M/T, est. value $600,000. Wants representation for wool raw materials to sell in Italy, especially in Prato area, near Florence. Est. annual sales potential $15.1 million. Acts as agency of raw materials for textile industry. Reply to—Stefano Storai, P.O. Box 503, Via Tirso 33, 50047 Prato (Florence). Cable Polytex Prato; phone 0574/39540; telex 57686 (Attn: Storai).

Publishing

2741365—BELGIUM—Road & city maps of U.S. Small size partnership estab. Jan. 1975, imports & wholesales road & city maps. Reply to—Christian Puravet, Mgr.-Owner, Foldex S.P.R.L., Chaussee D'Anvers 485, 1000 Brussels. Tel 215.42.17.

Special industry machinery

3551313—TAIWAN—Electrical slaughtering machinery for large slaughter house, capacity 1,500 hogs/8 hrs. Imports grinding, milling, trimming, other metal working machines & tools. Represents one U.S. firm & 9 European. Replies from mfrs. only. Reply to—Mr. G. W. Shiao, Sales Mgr., Hwa Hsin Trading Co., Ltd., 3rd Floor, 17-2 Nanking East Road, Sec. 4, Taipei, 104. Cable Hsinco; tel 7816145; telex 22380 Hsinco. Seeking rep. for bidding.

3559585 — GERMANY — Production machinery & test equip. for semi-conductor industry, such as bonders, automated diffusion furnace controls, related products. Reply to—Mr. Klaus Harmuth, Klaus Harmuth, 44/199 Rosenbergstrasse, D-7100 Heilbronn, Baden-Wuerttemberg. Phone 07131-570 624.

Romania Seeks Assistance With Two Mining Projects

Romania plans to open a large-scale copper mine at Moldova-Noua in 1976, and another at Rosia Poieni in 1977. The ores range from 0.2 to 0.3 percent; the Ministry of Mines plans to process about 9 million tons/year. The following equipment list was designed for capacities of about 10 million tons/year. Romania is looking to the United States, particularly for high volume flotation process equipment, crushers, grinders, cranes, vibrofeeders, vertical centrifugal pumps, and bucket excavators. The Ministry would like to find a single partner, capable of coordinating procurement, technology and mine development. Although the Ministry has said it wants to pay in processed copper, this may be negotiable.

Also, Romania has three deposits of sands bearing nickel, titanium and zirconium which it would like to exploit. Geological studies have been completed, but nothing more. The Ministry of Mines is seeking a firm which could provide equipment and technology for the whole process. Failing that, the Ministry would be interested in discussions with firms which can provide equipment and technology for the earlier grinding and wet-process stages. Participation could lead to sales of equipment or services elsewhere. Romania has formed a joint venture with Tanzania, which would like to develop similar deposits. Further details are lacking, in part because Romania is not experienced in this field. Interested firms thus have an opportunity to recommend techniques most suitable to the circumstances and their experience.

Firms interested in either opportunity should write to Nicolae Moldoveanu, Director for International Relations, Ministry of Mines, Petroleum and Geology, Str. Mendeleev 36-38, Bucharest, with a description of their services and experience. For further information contact Bert Planagan, Bureau of East-West Trade, U.S. Department of Commerce, 202-967-2836.

Future Construction Abroad

ALGERIA—Tenders are being invited by the Algerian Government for a **turnkey wheel plant** with production capacity of one million different types of wheels. Bids are due by Aug. 3, but firms must communicate interest by May 4 to Direction de la Planification et du Developpement Industriel, Sonacome, Route de Cheraga, Algiers (Cable Sncome Alger, Telex 52800). Offers must be in French in 10 copies and cover training of personnel, parts for 2 years, technical assistance, engineering and civil works, and financing terms. Specifications, on which variations are acceptable if identified, must be given in metric units. Tender documents available for 100 Algerian Dinars ($25.83) from above address or may be reviewed with Cherie Loustaunau, Rm. 6015, U.S. Department of Commerce, 202-967-4441.

ALGERIA—The Algerian Government is accepting bids on a **turnkey plant to manufacture dyes and organic pigments** with yearly capacity of 2,500 metric tons. Tenders for the project, which includes all civil works, are due by June 22 at SNIC, 15 Rue Victor Hugo, Hussein-Dey, Algiers (Cable Snicent Alger, Telex 52840). Offers must be in French in six copies, remain valid 6 months past bid deadline, and cover technical assistance, training of personnel, a guarantee, parts, professional references, patents, cash, and payment terms. Technical offer should be separate from commercial offer; specifications must be in metric units. Further details may be obtained from SNIC, 20 Rue Didouche Mourad, Algiers (Cable Sonamer Alger, Telex 52521). Tender documents in French are available for review with Cherie Loustaunau, Rm. 6015, U.S. Department of Commerce, 202-967-4441.

INDIA — The Government of Andhra Pradesh has extended until June 17 the deadline for bid submissions to construct a **barrage across 3 branches of the Godavari and Said Rivers with a road bridge** across the entire barrage. Totaling 3,593 meters in length with 175 bays, the barrage structure will comprise 175 reinforced concrete sills, each about 18 meters wide, between reinforced concrete piers. Elevation of sills will be plus 10.57 meters. Spillway leaf gates will raise pond level to plus 13.64 meters. A two-lane roadway will be provided over barrage. Value of project is about $45 million. Tenders can be reviewed at Office of Superintending Engineer, PWD., Godavari Barrage Construction Circle, Dowlaishwaram, East Godavari District, Andhra Pradesh. Applications for tender documents accompanied by treasury remittance, demand draft, money order, or cash in amount of Rs. 310 will be accepted until June 10. OPIC.

MALAYSIA—Contractors with experience in major highway and bridge construction are invited to apply for prequalification documents to construct **two highway projects** in the State of Pahang in peninsular Malaysia. Applications should be sent to Malaysia International Consultants Sdn. Bhd., 14, Jalan 20/16A, Petaling Jaya, Selangor, Malaysia with a copy to Director of Roads, Director-General of Public Works, Peninsular Malaysia, Jalan Tun Ismail, Kuala Lumpur. Contract No. 1 is a 39-mile secondary highway, and contract No. 2 a 15-mile secondary highway and 12-mile tertiary road. Construction of 2½ years expected to begin in late 1975. Deadline is June. OPIC.

PAKISTAN—Foreign contractors in association with Pakistani contractors are invited to apply for prequalification instructions for the **Indus Super Highway** by writing to Manager (Contract and Specification), Indus Super Highway Board, Ministry of Communications (Communications Division), Government of Pakistan, House No. 24, Street 28, F-6/1, Islamabad, by June 15. Starting at Karachi and terminating at Peshawar, project is divided into 11 sections with total approximate length of 1220 km. Construction time for each project section is 3 years. Width of finished pavement to be 7.5 meters in addition to paved shoulders. OPIC.

TURKEY — DSI (Directorate General of State Hydraulic Works) invites contractors/firms to prequalify for construction of **Karakaya Dam and Hydroelectric Power Plant.** Project consists of: concrete arch dam with crest length of 462 meters, height 173 meters, thickness 10 to 52 meters; power plant with six X 315 MVA units; spillway (17,000 M3/S) with ten radial gates 14.9 x 14.8 meters; two diversion tunnels, 13.5 meters excavation dia., 568 and 698 meters length; cable terminal on top of dam and three double circuit 380 KV transmission lines to switchyard which is 2.5 kilometers from dam and containing 380, 154, 31.5 KV sections. Contract scope has civil works and electro-mechanical equipment as gates, penstocks and elevators including: dam excavation 3,000,000 M3; dam concrete 2,000 000 M3; other excavation 850,000 M3; other concrete 770,000 M3; cofferdam fill 660,000 M3; penstocks 6 000 tons; switchyard steel construction 5,000 tons. Interested bidders must obtain prequalification documents from Devlet u Isleri Genel Mudurlugu, Barajlar ve Hidroelektrik Santrallar Dairesi Baskanligi, Ankara. Prequalification deadline is June 6.

The Overseas Private Investment Corp. (OPIC) offers political risk insurance to U.S. construction firms planning to submit bids on projects in certain developing countries, identified by the "OPIC" notation at the end of some items. For further information on OPIC's construction insurance program, write Information Officer, Overseas Private Investment Corp., Washington, D.C. 20527. Tel: 202-632-1854.

☆ U.S. Government Printing Office: 1975, 582-688/21

Commerce Department Directory

Commerce Building, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20230, (202) 783-9200

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ALBUQUERQUE, N.M., 87101, Room 316, U.S. Courthouse (505) 766-2386.

ANCHORAGE, 99501, 632 Sixth Ave., Hill Bldg., Suite 412 (907) 265-4597.

*__ATLANTA,__ 30309, Suite 523, 1401 Peachtree St., NE. (404) 526-6000.

BALTIMORE, 21202, 415 U.S. Customhouse, Gay and Lombard Sts. (301) 962-3560.

BIRMINGHAM, ALA., 35205, Suite 200-201, 908 S. 20th St. (205) 325-3327.

BOSTON, 02116, 10th Floor, 441 Stuart St. (617) 223-2312.

BUFFALO, N.Y., 14202, Room 1312, Federal Bldg., 111 W. Huron St. (716) 842-3208.

CHARLESTON, W.VA., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. (304) 343-6181, Ext. 375.

CHEYENNE, WYO., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave. (307) 778-2151.

*__CHICAGO,__ 60603, Room 1406, Mid-Continental Plaza Bldg., 55 E. Monroe St. (312) 353-4450.

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